UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Monday, March 3, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes All Regions.

HOW TO CONTROL LIVESTOCK DISEASES AND PARASITES.

OPENING ANNOUNCEMENT: At this time Station____presents Your Farm Reporter who is going to talk about controlling livestock diseases and parasites. This is an important subject, because, as you know, there is always some livestock disease or parasite waiting around the corner to slow down livestock production, hold back profitable gains, and otherwise curtail the reasonable profit that ought to come from livestock production. This is one of the regular Farm Reporter programs coming to you every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. All right, Mr. Reporter.

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This is the third day of March. That means spring is just around the corner, and almost in sight. Down in Dixie the birds are already courting and making plans for the new nest, buds are swelling, the air is fragrant, and everything shows signs of the new life which enters this world in the spring of the year.

It won't be long now until our pastures and farmyards will be dotted with young calves, playful colts, squealing pigs, fleecy lambs, and chirping chicks. Millionsof young animals will be born in the course of the next few months. How many of these young animals are we going to save, and how many are we going to bury? That's the economic question that interests every farmer.

When I was a small boy my Mother used to say, "Son, save your nickels and dimes and the dollars will take care of themselves." That's pretty much the case in the livestock industry. If we'll save more of the young livestock the older animals will come more nearly taking care of themselves. By raising a young animal until it's a few weeks or a few months of age, you have greatly increased its chances of reaching the market-------thus swelling your bank account, and making you a more successful farmer.

Last week I talked to you about taking care of young animals. Today I'm going to cover a little more territory and discuss the control of diseases and parasites in all of our domestic livestock. In order to give you the latest information on this subject I went over and had a talk with Dr. John R. Mohler, Chief of the United States Bureau of Animal Industry. He approached the subject in this manner:

"Young animals are valuable. They represent a tremendous investment.

Yet, in the past a large proportion of this new livestock has failed to attain maturity, or reach the market, through untimely losses which can be greatly reduced through foresight, and through a wider application of scientific methods known to be effective."

I asked Dr. Mohler what season of the year livestock suffered most from diseases and parasites,--and here's his answer to that question:

"With the coming of warm weather many livestock enemies, especially parasites, will become more vigorous in their attacks. These attacks will be directed principally against YOUNG AND LESS RESISTANT ANIMALS, and that's why we say take special care of young animals."

Not long ago I heard a livestock producer, who had recently visited his former home abroad, say that he was going to sell out before some of the serious plagues prevalent there reached the United States. He thought it impossible for this country to produce livestock without being subjected to foreign diseases sooner or later. I asked Dr. Mohler about that. Listen to his answer:

"Of the 10 livestock maladies of major importance, widely prevalent in the world, the United States is entirely free from 5. It is rapidly eradicating two others, has two more under effective control, and has the tenth under partial control. This country is free of many contagious livestock scourges which cause heavy losses in various parts of the world. These are kept out of this country by regulations of imports, by quarantine methods, and by veterinary inspection."

At this point I asked Dr. Mohler to tell you listeners just how some of these major livestock diseases and parasites were being controlled. Here he goes:

"Dipping has put the cattle-fever tick to flight. On a square-mile basis tick eradication is already about four-fifths completed.

"Tuberculosis, one of the most treacherous and persistent of infectious livestock diseases is also on the wane---due to the application of scientific knowledge in testing animals for this disease.

"Anthrax is prevented by vaccinating susceptible animals with the anthrax vaccine. It used to be a serious livestock disease."

Most of you listeners know how hog-cholera has been brought under control through vaccination.

Infectious abortion is now the most serious livestock malady in the United States. Though not fully understood, this disease can be suppressed to a large degree by sanitary measures combined with proper herd management.

Blackleg, glanders, scabies, sheep ticks, and many other livestock troubles have been minimized through the application of scientific information worked out in research laboratories.

Internal parasites, shipping fever, poisonous plants, rabies, and

poultry troubles can all be brought under control --- if livestock owners will only take the time to get the information and then apply it.

I asked Dr. Mohler to tell you people how to go about controlling these livestock diseases and parasites, and this is what he said:

"Make a careful study of the probable local danger from each disease. Obtain publications containing directions for dealing with the dangers in the most effective manner. Establish a high degree of farm sanitation, and finally consult a reliable veterinarian."

Summarizing, we find 4 outstanding points in Dr. Mohler's conversation.

First, diseases and parasites attack young and weak animals as a general rule. Take better care of young animals, build up herd resistance, and these losses will be reduced.

Second, the United States is a good place to produce livestock because our country is protected from many of the livestock scourges prevalent in foreign countries.

Third, stockmen in this country have the advantage of a great amount of scientific research work that has been done towards the control of livestock diseases and parasites.

Fourth, it's now possible to get free publications containing practical and useable information on the control of nearly all of the livestock diseases and parasites.

Dr. Mohler impressed me with the fact that stockmen and farmers ought to save more young animals, and thereby cut the unit cost of production. He believes that we should not be interested in seeing how many animals we can produce, but in how many of those produced can be grown to maturity, fattened for the market, or made to produce some kind of money returns. It's costly to raise a calf until it's 6 months old and then lose it. A farm which loses 40 per cent of the pigs farrowed can't compete successfully with the farm which raises 90 per cent of its pigs.

According to Dr. Mohler the object in controlling livestock diseases and parasites is to cut down the losses from that source. This makes it possible to market more of the young animals born on the farm, and thus cut the unit cost of production --- which is to say, make more profit.

Dr. Mohler believes that farmers and stockmen should challenge the death of every animal, and not be satisfied until the cause of the death has been found and measures taken to prevent future losses from that source. He doesn't believe that animals "just lay down and die." He believes there is a reason for every death. Trains don't leave the tracks and chase livestock out across the fields just to kill them. Cholera is not going to kill hogs unless the virus of cholera is there. It takes ticks to produce tick-fever, and if stockmen will find out about livestock diseases and parasites and then take steps to control these troubles, ---there will be more money in the livestock business.

Now I know many of you listeners are going to want some of the free publications on controlling livestock diseases and parasites, and here they are:

Farmers' Bulletin No. 834-F, "HOG CHOLERA."
Farmers' Bulletin No. 988-F, "LARKSPUR OR POISON WEED."
Farmers' Bulletin No. 1057-F, "CATTLE-FEVER TICKS."
Farmers' Bulletin No. 1069-F, "TUBERCULOSIS IN LIVESTOCK."
Farmers' Bulletin No. 1155-F, "DISEASES OF SHEEP."
Farmers' Bulletin No. 1330-F, "PARASITES OF SHEEP."
Farmers' Bulletin No. 1337-F, "DISEASES OF POULTRY."
Farmers' Bulletin No. 1536-F, "INFECTIOUS ABORTION."
Miscellaneous Publication No. 25-M, "CALENDAR OF LIVESTOCK PARASITES."

All of the above publications are free for the asking. Direct your request to this station, and if you desire information on additional livestock problems, consult your county agent, your State College of Agriculture, or write directly to the United States Department of Agriculture, Washington, D. C.

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CLOSING ANNOUNCEMENT: You have just listened to Your Farm Reporter talk about controlling livestock diseases and parasites. Write this station for any or all of the publications he mentioned. They are all free for the asking. This is one of the regular Farm Reporter programs coming to you every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Tuesday, March 4, 1930

NOT FOR PUBLICATION

CROPS AND SOILS No. 25--- WARNINGS AGAINST FAKE VARIETIES OF CROPS

Speaking Time: 10-1/2 Minutes.

ANNOUNCEMENT: And now we're going to hear from Your Farm Reporter at Washington again. This is Crops and Soils Day and the Reporter has been talking with different specialists in the United States Department of Agriculture and getting their opinions on seed and what kind of seed to plant this spring. He tells the story of 2 or 3 crop fakes and fakers and then gives constructive suggestions on how to avoid the fakes and get the genuine article. Let's hear them, Mr. Reporter.

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Seed-catalogue days and planting time bring to most tillers of the soil, whether they be large-scale farmers or 2-by-4 gardeners, a peculiar tingle of adventure.

This tingle is intensified by advertisements in papers, by circular letters, and the tall talk of seed and crop fakers.

Farmers are not more gullible than professional men and other members of the population. But it's pretty hard to resist the glowing claims of some of these seed fakes and crop fakes.

About 20 years ago, certain gentlemen got out a lot of publicity on the merits of what they claimed to be a new wheat. This wheat was given a catch name--- Alaska. On examination, this was found to be an old wheat known by many names such as: Egyptian, Eldorado, Jerusalem, Many-Spiked, Miracle, Mummy, Wheat-3,000-Years-Old, Wild Goose--- and so on. It was tagged as NEW, as ECONOMICAL, as a HIGH YIELDER, and better in many other ways than other wheats commonly planted. One of the favorite claims of the backers of this wheat was that it required but a small quantity of seed per acre. The backers wanted more for their Wild-Goose-chase wheat of course, but the farmer was to make it all up, and more, in higher yields, and so on. The wheat was nothing more nor less than a branch-headed wheat and it has been known in this country alone for at least 100 years.

Well, that matter came up 20 years ago and the Post Office Department issued a fraud order against the backers of this so-called MIRACLE WHEAT and their business suffered a relapse. But when I went to see Dr. Clyde E. Leighty (pronounced Lighty), a wheat expert of the Department of Agriculture, the other day, he told me that the wheat has by no means been forgotten. "We get plenty of letters from farmers

asking about this so-called Alaska or Egyptian wheat every year," he said. "In fact, I just finished answering a few of them."

"Will this wheat perform like its backers say it will, Dr. Leighty?" I asked.

He told me that this Alaska, Mummy, or Egyptian wheat has been used in this country very often as a means of deceiving people, BUT VERY SELDOM AS A FARM CROP. He told me that it has failed to produce even fair yields when tried in many parts of the country and HAS NEVER BEEN KNOWN TO PRODUCE EXTRAORDINARY YIELDS. He told me that it is not as good a milling wheat as many other well known and widely grown varieties. And he told me that the branched head is not a sign of SUPERIOR YIELDING POWER.

"If I were about to fall for the claims of some miracle wheat--- if I were about to buy some of this seed --- what would be your advice to me?" I asked.

"I'd say, DON'T," said Dr. Leighty. "If you were growing wheat, I'd recommend that you buy home-grown seed unless your State agricultural experiment station or the United States Department of Agriculture advised otherwise."

There was one more thing Dr. Leighty cautioned wheat growers against. "Buying wheat grown at a great distance from home is a risky proposition," he said. "Wheat grown and bred for California conditions, for example, no matter how good for California, is not adapted to the country east of the Rockies. Neither would the wheats adapted to the Atlantic Coast or the Mississippi Valley succeed in California."

Crop fakers don't limit their activities to wheat. A couple of years ago, a crop called SAGRAIN was commercially exploited in the South and the seed was offered for sale at a high price. Dr. John H. Martin of the Department told me that this Sagrain was nothing more nor less than a selection of SCHROCK SORGHUM. Schrock sorghum originated at Enid, Oklahoma, in 1910 and reached the Mississippi a few years later. From this start, we got the selection called Sagrain which sold for as high as $7.50 a bushel for seed.

Dr. Martin also told me about a millet called Proso or Hershey which was being praised to the skies as something new by different people, mainly those who have seed for sale. This is merely the common millet of the Old World, which has been known since prehistoric times and has been grown in this country since Colonial days, under such names as hog millet, broomcorn millet, etc. Not much Proso is grown in this country, but it is suited to the northern prairie and Great Plains sections where it is grown to a limited extent as a late-sown catch crop.

One of the main reasons for clover and alfalfa failures is the use of unadapted seed. That's the opinion of Dr. A. J. Pieters, a forage expert in the Department of Agriculture. Dr. Pieters thinks that it isn't necessary to tell the farmer to plant clean seed which will germinate. But he does think it's necessary to warn farmers against planting UNADAPTED clover and alfalfa seed. We get considerable clover seed from France, Italy, and Chile. The plants produced from much of this imported seed aren't adapted to conditions in the United States, he says.

Just as an example, experiments conducted by the Department of Agriculture and the State experiment stations have proved that plants grown from clover seed produced in Italy usually won't stand the winters in the Ohio River Valley. Plants produced from seed from France and Chile have usually come through the winters. French clover, however, has usually proved inferior to American clover in yield and both French and Chilean clovers recover poorly after the first cutting and often make a poor second growth or none at all.

We have the same troubles with UNADAPTED alfalfa seed. Experience has shown for a long time that a large part of the winterkilling in Northern alfalfa fields is due to the use of unadapted seed. And so we now have a law which requires that alfalfa seed from foreign countries be stained before it is allowed to enter the United States. Here are the staining regulations----

In the case of alfalfa seed imported from any foreign country, 1 per cent of the seed in each container is to be colored green, with the following exceptions: (1) Seed from Turkestan and Africa, colored 10 per cent red. (2) Seed from South America, 10 per cent orange red. (3) Seed from Canada, 1 per cent violet. (4) Seed of unknown origin, 10 per cent red.

You might think, after hearing all this, that it would pay a farmer to grow his own seed. I took this question to different Department of Agriculture experts and they gave me 8 good reasons why the farmer does not, and here they are: (1) His field may be full of weeds. (2) Soil, climatic, and other conditions on his farm may be unfavorable for seed production in a given year. (3) Altitude, latitude, or rainfall in the farmer's locality may not favor the production of a particular kind of seed in any year. (4) He may be able to buy better seed at a lower cost than can be produced in his community. (5) He may find it more profitable to grow a crop of hay or forage than seed. (6) He may not have the facilities for harvesting, cleaning curing, or otherwise preparing his seed for planting purposes. (7) He may need seed of a crop that hasn't been grown by him for several years, if ever at all. (8) He may have to replant his fields either with the same kind of seed--when his supply was exhausted with the first planting --- or with a catch crop.

Now let's sum it all up. Mr. O. S. Fisher, a seed expert of the Department's Extension Service, says there are 3 questions which the farmer should consider when buying seed: (1) Will it grow? (2) Is it adapted to my section of the country and of the State? (3) Is it free from varietal mixtures and weeds?

Mr. Fisher says that 36 states at the present time are carrying on a more or less definitely organized seed-improvement and crop-standardization program. These seed organizations in all cases are specializing on adapted crops. They take a few crops which have been proved to be adapted to a section and then do all they can to see that farmers growing these crops get seed from the recognized varieties. In some cases, the State Departments of Agriculture direct this seed-improvement and crop-standardization work. In most cases, however, boards composed of farmers cooperating with the State Agricultural college handle the work. Farmers who buy seed through these organizations may be sure of getting the genuine

article --- not fakes.

If a farmer is in doubt about what crop variety to grow on his farm --- if he isn't sure just where to go for reliable seed --- Mr. Fisher recommends that he talk with his county agricultural agent.

Before closing, I want to mention a few bulletins that have a bearing on the subject. If you are interested in Proso, or hog millet, send for a copy of Farmers' Bulletin 1162-F, Pointers on growing the grain sorghums, with information on suitable varieties, are found in Farmers' Bulletin 1137-F. Tips on improving the clover yield are found in Farmers' Bulletin 1365-F, called CLOVER FAILURE. COMMERCIAL VARIETIES OF ALFALFA, Farmers' Bulletin 1467-F, has much information on reliable varieties of this crop.

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ANNOUNCEMENT: And that concludes our visit with Your Farm Reporter at Washington today. Write him in care of Station_____if you wish free copies of the publications he mentioned. They are:

PROSO, OR HOG MILLET, Farmers' Bulletin 1162-F.
GRAIN SORGHUMS AND HOW TO GROW THEM, Farmers' Bulletin 1137-F.
CLOVER FAILURE, Farmers' Bulletin 1365-F, and
COMMERCIAL VARIETIES OF ALFALFA, Farmers' Bulletin 1467-F.

If you want information on recommended oat, barley, rye, or other crop varieties, write for appropriate bulletins, mentioning the crop you are interested in.

UNITED STATES DEPARTMENT OF AGRICULTURE
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YOUR FARM REPORTER AT WASHINGTON Wednesday, March 5, 1930.

NOT FOR PUBLICATION

Speaking Time: 10 minutes.

Poultry Interview No. 25: GROW HEALTHY CHICKS

ANNOUNCEMENT: The watchword of the poultry industry today is "Grow Healthy Chicks." Your Farm Reporter at Washington takes this watchword as his text for today, and he brings you now the results of his interview on that subject with Mr. A. R. Lee of the United States Department of Agriculture. This report is brought to you by Station_____ through the cooperation of the Department of Agriculture. All right, Mr. Reporter.

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"A healthy chick
Makes money quick."

You might say this is the theme song of modern poultry raising. And if that one isn't snappy enough for you here's another -- it isn't very elegant, but you can't say it isn't forceful. It goes like this:

"A wormy chicken
Isn't worth pickin'."

This seems to be an age of slogans and watchwords and theme songs, so the poultry industry is merely keeping up with the times. A bright friend of mine tells me that even dog catchers have a theme song. The title is: "You can say what you please about a dog catcher. He's one man who always whistles at his work."

And speaking of whistling at your work I venture to remark that whistling comes a lot easier for the poultryman who adopts "Grow Healthy Chicks" as his slogan than it does for the poultryman who still follows out-of-date practices.

I guess you all know the reasons back of the grow-healthy-chicks programs that quite a number of States are carrying on. As Mr. Lee explained it, they are designed to solve a problem that can be divided into three parts. First, high death rate in chicks; second, lack of development in growing stock; and third, failure of pullets to lay well.

I take it that most folks realize the need of cutting down the death rate of young chicks. Obviously the fewer chicks that die the more of them will grow up to pay for their feed and keep, and an extra profit for the keeper.

But Mr. Lee says that, important as this is, the lowered death rate isn't the biggest reason for growing healthy chicks. And maybe this

is something that all of us haven't realized. In cold dollars and cents, he declares, the grow-healthy-chicks program has been of most profit because it produces better-grown pullets. Healthy chicks mean better-grown pullets, better-grown pullets lay more eggs, and more eggs of course mean more money.

To illustrate this, he showed me the results of a recent survey in Connecticut. The survey shows that there is a decided increase in egg production when a grow-healthy-chick program is followed consistently.

Of course the grow-healthy-chicks program is really nothing more than a program of sanitation. In Connecticut they follow what they call an 8-point program. It's fairly typical of the programs of other States so let's examine the 8 points. Here they are: First, clean chicks; second, clean incubators; third, clean brooder houses; fourth, clean ground; fifth, clean litter; sixth, clean feed; seventh, clean management; and eighth, clean laying houses.

Some States include early hatching as a point in their programs. And there are other minor variations. But they all come down to the same principle: Start with clean chicks and then keep them clean. Give them a chance to be healthy and they will be.

To be satisfied as to the truth of this last statement you have only to look over the results that poultry raisers get by following these grow-healthy-chick practices. Take Maryland, for instance, where poultry raisers in four counties have followed the eight-point program.

In 1928 poultry raisers who followed all eight of these points lost only 6.1 per cent of their chicks. Those who followed all but the first point, clean chicks, lost 13.5 per cent; all but "clean ground," 10.4 per cent; all but both clean chicks and clean ground, 15.4 per cent; and those who failed to follow more than three of the points lost 21.8 per cent.

Clean chicks, Mr. Lee explained, means chicks from healthy breeding stock, which has been tested and found free from B.W.D. Ground is considered clean when no chicks have been allowed to run on it for at least a year, and when no poultry manure has been spread on it during that time. Land which has been used should be cultivated, cropped and re-seeded.

Mr. Lee says poultry raisers have found the ideal system is one which provides three or four separate ranges they can use in a 3 or 4-year rotation. That gives time to establish a good sod. Clover range is better than grass range and alfalfa is better than clover.

I think most of the other points, such as clean brooders, clean incubators and so forth, are self-explanatory, but I wasn't quite clear about the meaning of clean management, so I asked about it.

"By clean management," Mr. Lee replied, "we mean taking every possible precaution to avoid bringing in disease from the outside. The most dangerous

source of infection for the young chicks is the old stock on the farm. Diseases such as worm infestation and coccidiosis can be easily carried around on the feet, or on shovels, or on any piece of equipment moved from one place to another."

"How are you going to avoid this?" I asked.

"Well, the best thing to do is not to use the same equipment for young and old stock," he answered. "When the young stock is on range keep any visitors out of that field. And if you locate the water dishes and feed boxes at the fence line you can cut down the number of trips you have to make to the range yourself."

I count among my own acquaintances two poultrymen who were about ready to give up poultry raising three years ago. Disease was eating up all their profits. Then, as a last resort they took up the grow-healthy-chicks program. And now after three years their flocks are healthier than they ever were before.

I know a woman who raised to maturity 498 out of 500 chicks, and she did it in a neighborhood where disease was causing great losses.

Then let's look at those records of the home egg-laying contest up in Connecticut. For six years before the grow-healthy-chick program was started the average egg production in the Connecticut farm-egg-laying contest was 142 eggs. The first year of the program, 1926, it increased to 144 eggs; in 1927 it was 154 eggs, and in 1928 it had increased to 161 eggs. Grow-healthy-chicks practices helped to bring about an increase of almost 20 eggs per hen within three years.

The idea of the grow-healthy-chicks programs is to reduce the risk in poultry raising and put the industry on a firm business basis.

Sanitation is not a simple matter, but it pays big dividends. I suggest that you write for that bulletin on "Farm Poultry Raising," Farmers' Bulletin No. 1524-F; and also the bulletin on "Incubation and Brooding of Chickens," Farmers' Bulletin No. 1538-F.

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ANNOUNCEMENT: Address your requests for bulletins to YOUR FARM REPORTER in care of Station_____ or in care of the United States Department of Agriculture at Washington. I'll repeat the two he mentioned today in case you didn't get the numbers. They are "Farm Poultry Raising," Farmers' Bulletin No. 1524-F; and "Incubation and Brooding of Chickens," Farmers' Bulletin No. 1538-F.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON

Thursday, March 6, 1930

NOT FOR PUBLICATION

Speaking Time: 8 Minutes.

Cooperation Interview 26: COOPERATIVE MARKETING OF FRUITS AND VEGETABLES IN 1930.

OPENING ANNOUNCEMENT: Mr. and Mrs. America and all the little Americas have gone in strongly for fruits and vegetables in the family diet during the past decade. So has developed an immense group of agricultural industries, each with its own peculier problems of production and marketing. The Federal Farm Board is charged with assisting these as well as all other industries to develop orderly marketing and cut down distribution wastes. Preliminary plans for 1930 are summed up for you today by your Farm Reporter at Washington, who has been talking with the Board's cooperative fruit and vegetable marketing specialist, Mr. K. B. Gardner. What about it, Mr. Reporter?

--ooOoo--

Well, how much time have you? It would take a person with the mind and the throat muscles of John Bright, who talked for a whole day in the British parliament about a hundred years ago, to survey for you the whole field.

Being one of these decadent moderns, I haven't the mental power nor the sturdy voice box to do a job of that sort. So don't be alarmed. In about 10 minutes, I'll try to give you the high lights of the situation, as they are illuminated for me by Mr. Kelsey B. Gardner of the Farm Board's division of cooperative marketing.

Mr. Gardner began by pointing out to me the size of the fruit and vegetable business. Said he:

"During the twelve months of 1928, a total of nearly 1,100,000 carloads of fruits, melons, and vegetables was shipped to market by agricultural producers in the United States. To this large movement every State in the Union contributed.

"Although figures relating to cooperative activities are incomplete, we do know that over 200,000 of these carloads of fruits, melons and vegetables were shipped and sold by growers through their own cooperative sales agencies.

"The cooperative movement of fruits and vegetables thus assumes importance. Two years ago it included at least 1,269 associations with an estimated membership of 215,000 growers who carried on a business of some 300 millions of dollars through their own cooperative organizations.

"When we look more closely at the field of cooperative effort in the fruit and vegetable industry, we discover a picture with many shades of variation according to each commodity and its several producing sections. For example, cooperation among citrus growers is high. In California about 85 per cent of the citrus crop is handled through cooperative associations. On the other hand, certain of the melon and vegetable crops are hardly represented in the ranks of cooperative associations.

"The development and coordination of cooperative effort in the marketing of fruits and vegetables thus presents a problem of importance. Too often we have had the spectacle of numerous cooperatives forwarding the products of their members to market without regard to the marketing plans of competitor cooperative associations. The glutted markets resulting from this unorganized marketing and the frenzied efforts of sellers have enabled buyers to take full advantage of the lack of united effort on the part of producer shippers. The condition is made more difficult when the disorganized efforts of individual growers and private shippers are added to the marketing picture. This situation has been the order of procedure too long. In the interests of producers and consumers, development of more united effort is required.

"The 1930 program for the cooperative marketing of fruits and vegetables is therefore based primarily upon a three-fold policy of (first) strengthening existing cooperatives, (second) of developing more efficient organizations of important regional producing areas, and (third) the establishment of national sales organizations for some of the commodities where cooperative effort is sufficient to support sales organizations of this character.

"Acting on this program, growers' organizations engaged in the marketing of dry beans, are engaged in the development of a central organization for the selling of the different varieties of this commodity grown in the several bean-producing states.

"A second national selling organization is contemplated in the marketing of potatoes handled by cooperative associations. At a conference held in Washington January 14-15, representatives of cooperatives handling potatoes appointed an organization committee to work with the Federal Farm Board in the development of a national marketing organization for this commodity.

"Through organizations of this type will be developed a centralized, unified and coordinated effort among cooperative associations in the distribution of fruits and vegetables. From such organizations producers have a right to expect more economical operation, the elimination of duplication of sales effort among cooperatives, and more intelligent and efficient marketing. Through educational effort, producers may also expect an increased probability of adjustment of quantities produced in accord with sales conditions more satisfactory to producers, thereby tending to do away with some of the disastrous financial effects which arise from unwise increases in plantings.

"Supplementing the program of the development of national organizations is also the coordinating and bringing together of cooperative effort within a single producing region. Already active steps are being taken to concentrate cooperative effort in the marketing of citrus fruit in Florida. At the same time, additional members are being added to the cooperative organization in this area, so that its volume of business is being materially increased.

"There is also in progress the building up of a unified cooperative marketing program in the Wisconsin and Michigan fruit areas. Under this program it is planned to provide processing plants for some of the fruit produced in this area, after a sufficiently large sign-up of growers has been accomplished.

"The fruit and vegetable industry needs more producer-owned and producer-controlled marketing cooperatives. The program for 1930 and for succeeding years may well be based on the development of unity of effort and the establishment, wherever practicable, of large scale cooperatives.

"This program should also include a recognition of the development of better standards of production, grading and packing in many producing areas. It is also fundamental that these cooperatives be well-managed by competent boards of directors and employees who possess definite knowledge of the the possibilities and limitations of cooperative efforts. Sound business principles must be the order of procedure. These larger cooperative efforts with an outlook which is more than local will thus form one of the most important steps toward placing the fruit and vegetable industry of agriculture on a basis of equality with other industries."

I have given you , straightaway, Mr. Gardner's review of the plans in the making for the cooperative marketing of fruits and vegetables during 1930. And I may say that it seems to me a mighty concise, interesting summary.

Now, I don't know your own particular problems of cooperative marketing. But I do know that you can get information on them from your State Agricultural College. Also, I recommend that you obtain from the Federal Farm Board , the summary of work of the Board during the first six months of its existence. This 8-page review will make you more thoroughly familiar with what is going forward in this year's effort to organize agriculture in America.

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CLOSING ANNOUNCEMENT: Your Farm Reporter at Washington has summarized for you plans for cooperative marketing of fruits and vegetables in 1930. Send him your requests for copies of the Federal Farm Board review. Address him at this radio station. Next Thursday he again brings you a report on the current activities of the most important development in American agriculture this year -- cooperative marketing. Tomorrow he reverts to your production problems with a dairy talk.

UNITED STATES DEPARTMENT OF AGRICULTURE
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YOUR FARM REPORTER AT WASHINGTON Friday, March 7, 1930.

NOT FOR PUBLICATION

Speaking Time: 10 Minutes.

Dairy Interview No. 25: LOOKING AHEAD TO MIDSUMMER.

ANNOUNCEMENT: Now if you dairy farmers will pull up your chairs we'll have our regular Friday report from Your Farm Reporter at Washington. He brings you today the results of his interview with Mr. T. E. Woodward, who is investigating dairy cattle feeding and management problems at Uncle Sam's dairy experimental farm, Beltsville, Maryland. Mr. Woodward told him about preparing early for midsummer feeding, and now he passes it on to you. Here he is ----

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When people talk about planning ahead I'm always reminded what the world lost when the great North Pole Wazookus went out of existence. Maybe you aren't familiar with the wazookus, but thousands of years ago it was famous as the world's dumbest animal.

According to the story told to me, it was so dumb you could hit it with a sledge-hammer and it wouldn't realize it until four to six months later. Then it would lift its giant head and bellow long and loud. The exact time it took for a wazookus to realize it had been hit depended on how far you hit it from the brain.

Legend records that inhabitants of the far north, where nights are six months long, used the wazookus as a sort of alarm clock. When they went to bed on time they would pound it on the tail bone, And then just as the northern sun peeped up over the icebergs the wazookus would bellow in pain, waking them up. Or if they got in a little late they would strike a blow at the proper spot in the ribs. And if they wanted to get up at midnight to feed the cat they would hit it in the neck.

It seems the only trouble with the wazookus was that you couldn't reach out and shut it off if you wanted to sleep a couple of weeks longer.

Well, you can believe this legend or not, but I can't help thinking what a big help the wazookus could be today. Everybody could have a half-dozen or so. We could set one to bellow about December 1 to remind us to do our Christmas shopping early. You dairymen could have another one to remind you it was time to begin special feeding for fall or spring freshening. Another could warn you to begin laying in a supply of feed. And so forth. What a relief it would be not to have to think about keeping ahead of the procession, knowing that our dependable wazookus would keep us on schedule.

Take the subject I'm reporting to you on today. Last September while it was still fresh in our minds we could have labeled one wazookus "summer feeding." And about this time he would be bellowing, and we'd know that now is the time to be preparing for midsummer feeding.

As it is we have to remember to look ahead of our own accord. And without any wazookus bellowing in our ears it's easy to pass over preparations for the future, especially when we have plenty of preparing to do for the present. It's easy to think that we have plenty of feed for the next few months, so why worry about next August - there's plenty of time for that.

I guess it's common to most of us to take things as they come and worry about them then. But we can't deny that the folks who do plan ahead usually are successful, and they're usually the ones who have the least worrying to do in the long run.

So let's get out the glass globe and crystal gaze for a few minutes. Here is a midsummer scene. The grass in this field is short, and in that one over there it seems dried up and woody. The sun is bearing down in all its glory. Flies are buzzing about happily, but they seem to be the only ones who are happy. Certainly those dairy cows don't look very joyful--- some of them look as if they hadn't had enough to eat. And that dairyman under the tree seems worried about something besides the heat.

Now let's throw away the crystal ball and pick up some brass tacks. You all know this picture is a pretty common one. Hot weather and flies and dried-up pastures make midsummer a pretty miserable time for lots of dairy cows. They get thin and their milk production falls rapidly. But if that were all it wouldn't be so serious as it really is. According to Mr. Woodward what makes it serious is that this loss in milk flow is not just a temporary loss. It's something that you can't get back even if you feed liberally later on.

So that's why Mr. Woodward declares that maintenance of milk flow in the late summer is just about the most important problem the dairyman has to deal with. And he believes now is the time to deal with it.

The question is what to do? Obviously, you must provide more feed. It may be grain, hay, silage, soiling crops or additional pasture. If grass in the permanent pasture stays fairly abundant and succulent, grain alone may be enough as a supplementary feed. But in most cases other feeds are needed. And that is what needs to be thought about now.

Of course one of the most convenient ways to provide this feed is through the summer silo. It is too late now to be talking about constructing and filling a silo this season, but it isn't too late to begin laying plans to raise corn or other crops to fill the silo next season. In this case it means looking ahead a year instead of a few months.

But another good way to help short pastures is to cut some corn from your regular corn fields and give it to the cows in pasture. This method even has some advantages over feeding summer silage. It takes less labor and it takes no buildings at all. But on the other hand, more feed is apt to be wasted through tramping and soiling.

Another point is that the feed may be needed before the corn has matured sufficiently, and the food material obtained per acre is thereby reduced. So Mr. Woodward says that if dairymen plan to feed corn in this way it's better if possible to plant part of the field to corn of an early variety. You might also locate the corn field beside the pasture, so you can simply cut the corn and throw it over the fence. This will save using a team and wagon to haul the corn.

Another way is to cut clover and alfalfa from the field and feed it. But clover and alfalfa should be fed in the stable or in a rack to avoid unnecessary waste.

Now as to pastures. As you know, pasture grasses always grow faster in the spring than they do in late summer. So a pasture sufficient for cows in spring and early summer will not be sufficient in July and August. And on the other hand a pasture sufficient for July and August will be more than enough for the early summer. In one case it means supplementing the pasture in late summer; in the other it means cutting a part of the field for hay early in the season and later on using it for grazing.

A good way to provide for the shortage in late summer is to have a temporary pasture, Mr. Woodward suggests. And he goes on to say that if small grain is grown timothy and clover or sweet clover are often sown on it in the spring. Then much grazing pasture is furnished by the grass or clover after the small grain is harvested. This is the most common method and Mr. Woodward is inclined to think it's about the best, since it requires no special crops, no special labor and no special field.

I asked him about Sudan grass.

"Well," he replied, "sudan grass is a fairly good temporary pasture, although its carrying capacity is not nearly so great as you'd think from the amounts of hay it yields. I'd say that sudan grass is probably better for hay than it is for pasture. On good land and with normal rainfall you can't safely count on it's carrying more than about 1 cow to the acre for a 60-day period."

And then he pointed out another possibility -- the possibility of increasing the yields of permanent pastures by using lime, manure and fertilizers. He advises all dairy farmers to consider this, especially where there is limited pasture. For experiments have proved time and again that fertilization not only may greatly increase yields but that it also improves the quality of pasture.

But no matter what you do, the important point seems to be that now is the time to <u>think</u> about it. And if you're going to fertilize your pastures or sow clover for temporary pasture, now is the time to <u>do</u> it.

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<u>ANNOUNCEMENT</u>: Your Farm Reporter has just brought you his weekly report on dairying, and he asks me to tell you that he'll be glad to get you copies of the Department of Agriculture bulletin on "Feeding Dairy Cows." Write for Farmers' Bulletin No. 743-F, and Leaflet No. 7-L. Address your requests to Your Farm Reporter at Station____ or at the Department of Agriculture in Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON. Monday, March 10, 1930.

NOT FOR PUBLICATION

Speaking Time: 10 Minutes All Regions.

TON LITTERS AND PIG - CROP CONTESTS.

OPENING ANNOUNCEMENT: At this time Your Farm Reporter is going to talk about Ton Litters and Pig Crop Contests. He got this information by interviewing one of Uncle Sam's livestock specialists. This is one of the regular Farm Reporter programs coming to you every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. All right, Mr. Reporter.

--ooOoo--

In the early days of this country an old lady, along with many others, visited the new railroad to see the first train come in. Presently the train came rolling up the track. The doubting old lady looked at it in wonder, and then said, "Well, well, ------there it comes, but they'll never stop it." However, the train did stop, and then the old lady said, "Well, they did stop it, but they'll never be able to start it again." At the appointed time the train gave a few loud puffs and rolled away toward the next station. "Come on," said the old lady, "Let's go home. I'm ready now to believe anything you tell me, if I can just see it myself."

That's not a new story. We have always had Doubting Thomases, People stood around the Ark and told Noah that it wouldn't float. We used to think it was impossible to fly across the Atlantic,---but Lindbergh did it. It's just a habit we have of saying a thing can't be done until somebody does it, and then we all fall in line and march on down the road.

Now this was exactly the case back in 1922 when Jim Wiley of Indiana proposed to make a litter of pigs weigh a ton by the time they were 180 days old. Hoosier farmers said it couldn't be done, and they cited examples to prove that such a thing was impossible. They said the average litter contained 5 pigs, and that each pig would have to weigh 400 pounds by the time it was 6 months old in order for the litter to weigh a ton. That, they said, was absolutely impossible.

However, a few of Jim's friends believed in his ton-litter idea and gave it a trial. At the close of 1922, 36 litters had made the unbelievable record and produced a ton or more of pork per litter. This broke the ice, proved that the impossible could be done, and established the ton-litter contests which are now general throughout the country.

I thought you radio listeners might be interested in having a little pork talk mixed in with the rest of your program, so I went over and had a talk with Dr. C. D. Lowe, in charge of livestock extension work for the Department. I asked him to tell me something about Ton Litters, and what that movement has done for the hog industry. Here is what he said.

"A ton litter is simply a litter of pigs weighing a ton or more by the time they are 180 days, or 6 months of age. Jim Wiley started the ton-litter idea in Indiana in 1922. Thirty-six litters made the record that year. The idea was popular and 1923 saw 10 states in the game and 263 litters made the ton record. The following year 22 States entered the contest, and 444 litters won out. In 1925, 26 States and 767 litters made the record while in 1926, 28 States produced 808 ton litters. At this writing 37 of the 48 States are interested in some form of ton-litter contest. Some States have varied the contests to meet their particular needs, but the ton-litter idea of producing pork has gone across and the work is going merrily on. More than 4,000 litters of pigs have made the record since the ton-litter contests were established 8 years ago."

I asked Dr. Lowe to tell you radio listeners some of the outstanding things in the ton-litter contests. He replied by saying that the ton-litter idea had done four big things for the hog industry. Here they are:

First, it has demonstrated the fact that hogs can be successfully grown in practically all sections of this country. Southern, Eastern, Western, and Corn Belt States alike have made splendid ton-litter records. This friendly competition is going on from the Atlantic to the Pacific and from the Great Lakes to the Gulf.

Second, these contests have demonstrated the fact that large litters of thrifty pigs cut down production costs. Indiana hog raisers found that it cost twice as much to produce pigs when there were four to the litter as it did when there were eight. In Texas a Poland-China sow farrowed and raised 14 purebred pigs which weighed more than 4,000 pounds - two tons - at the end of the contest. These pigs netted the owner more than $200. Such a profit would have been impossible had the sow farrowed 4 instead of 14 pigs. Now as a matter of fact it requires medium or large-sized litters to make the contest. No litter of less than seven pigs has ever made the record, and 10 pigs is the average size of the litters when we consider all litters throughout the contest. Now if it's profitable for the man in the contest to raise medium and large litters of pigs, then it's also profitable for the average farmer or hog raiser. The ton-litter work has demonstrated that large litters pay.

Third, these contests have clearly demonstrated the fact that pure-bred pigs make better gains, are more efficient pork producers, than just ordinary hogs. A razor-back sow might farrow 15 pigs and raise them all, but it's very doubtful if such a litter could be made to weigh a ton by the time the pigs were 6 months of age. Runty pigs make poor gains in the feedlot. They are not good in ton-litter contests, neither are they profitable in the farmer's feedlot. The ton-litter idea demonstrated beyond any shadow of adoubt that it takes good pigs to make rapid gains.

Fourth, and last, Dr. Lowe said that ton-litter contests have shown that full feeding of market hogs tends toward cheaper gains, lessens disease hazard, and permits marketing during the more favorable seasons. We used to let pigs run around until we were ready to start pushing them for the market. The ton-litter idea taught us that it pays to keep a pig going in 'high' from the farrowing pen to the smokehouse. It's costly to let it slow down and pick up again. One big railroad estimates that it costs $25. to have their crack train slow down and stop unexpectedly. When big machinery is once set in motion it is kept that way. Henry Ford is the only man who ever shut down $400,000,000 worth of big equipment for 6 months without looking a sheriff in the face. We can't expect hogs to do that well, so it's up to the progressive hog raiser, whether he has one sow or 50 to keep the pigs moving from farrowing to marketing.

Healthy, vigorous, rapid-growing hogs are generally resistant to the many disease and parasite enemies of the hog. By farrowing early, and feeding a full ration, pigs may be marketed early in the fall when prices usually are high.

"What else has the ton-litter contest done?", was my next question to Uncle Sam's livestock extension specialist.

"Well," he said,"it has been the means of scattering profitable swine-production information all over the country. Club boys have taken the idea back to the farms where it has been put in practice by thousands of non-competitors. Down in Tennessee the swine extension Specialist, Mr. McCloud, advises farmers not to go into the ton-litter contests to see how big they can make hogs grow, but to follow the ton-litter method to produce hogs that will make more money."

"Are there any improvements that could be made in the ton-litter contests?" was my next query to Dr. Lowe.

"Yes," he replied. "Hogs generally bring the most money per pound at handy weights-from 180 to 220 pounds. When contest pigs reach this weight, and their total makes the ton, right then I would sell, provided of course the price is good. It costs more to put an additional pound on a 400-pound hog than on a 200-pound hog. Excessive hog weight is often put on at a loss."

"Now Dr. Lowe," I said, "What is the future of the ton-litter idea?"

"It's good," was his reply. "Of course it will have modifications to meet certain conditions, but the principle will stay. The yardstick for measuring hog profits has been made, found profitable, and we'll keep it.

"In 1926 M. B. Posson of Nebraska offered a pig-crop contest to farmers in that section. This contest is an outgrowth of the ton-litter idea. The ton-litter idea meets the demand of farmers with a few sows or only one. The pig-crop contest meets the demand of commercial hog raisers with many sows. It measures the pork production of all the sows on the farm, rather than just one litter of pigs, and there are now 10 states in this contest."

I could have listened to Dr. Lowe's pig talk for another hour, but my time was up so I had to shake hands and depart. If you want further information on profitable hog production, write this station for "SWINE PRODUCTION", which is the title of Farmers' Bulletin No.1437-F. Next Monday at this time, I'm going to talk about taking care of farm harness.

--ooOoo--

CLOSING ANNOUNCEMENT: You have just listened to Your Farm Reporter talk about ton-litter, and pig-crop contests. He mentioned Farmers' Bulletin No.1437-F, entitled "SWINE PRODUCTION." Write this station for a free copy of that bulletin. This is one of the regular Farm Reporter programs brought to you through the cooperation of the United States Department of Agriculture.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON. Tuesday, March 11, 1930.

NOT FOR PUBLICATION

SPEAKING TIME: 10 Minutes ALL REGIONS

DOES IT PAY TO TAKE CARE OF FARM MACHINERY?

OPENING ANNOUNCEMENT: Does it pay to take care of farm machinery? That's the question Your Farm Reporter asked agricultural engineers in Uncle Sam's Department of Agriculture. If you can spare 10 minutes follow this talk and listen to the way in which that important question is answered. This is one of the regular Farm Reporter programs coming to you from this station every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture and Station_____. All right, Mr. Reporter, let's go.

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Well folks, I'm going to talk about a dry subject that's sometimes wet. This subject is farm machinery, and when it's dry it's dry all over, but after standing out in the open fields all winter it often becomes as wet as the Mississippi River at flood stage.

"Does it pay to take care of farm machinery?" That's the question I asked Mr. G. A. Cumings, one of the agricultural engineers over in the United States Department of Agriculture. Listen to his reply.

"Good equipment makes a good farm better, and of course it pays to take care of anything worth while, and that certainly goes for farm machinery."

Many of you listeners have no doubt heard and read a great deal about the tremendous amount of money farmers lose every year by not housing their farm machinery. I asked Mr. Cumings to give me his views on this widely discussed question, and I want you listeners to hear his answer to that important phase of the farm machinery problem. Here he goes.

"The actual value of housing farm machinery is a question that is receiving considerable discussion at the present time. Here are some interesting facts which the University of Missouri worked out on that subject in 1927."

A walking plow, according to the best averages obtainable, lasts 15 years if not housed, and 20 years housed. Twenty years is the life of a gang plow when housed, and this is cut in two when the plow is exposed. Four years is the average life of an exposed corn planter, and this is doubled when the planter is housed. A binder lasts 5 years exposed and 12 years housed. The life of a housed farm wagon is 24 years, but old man weather cuts that to 10 years when the open sky is the shelter.

That report was from Missouri. Now let's take the night train and run up to the Iowa State College --- out where the tall corn grows, and see what they have to say about housing farm machinery. Here it is in one short sentence in a report made in June 1929.

"While the housing of farm machinery is desirable, systematic repairing has more influence on the life of farm machines."

Here's what Illinois has to say on the subject.

"The watchword of the farmer in regard to his machinery should be 'Good machinery, properly oiled, repaired, adjusted, and well housed.'"

Now it seems to be a rather general opinion that housing is an important factor in the care and life of farm machines, but it is evidently clear that housing is not the whole thing, so I asked Mr. Cumings to cover more territory, and tell me why one disk harrow lasted for 4 years and another for 7 when both were operated under apparently the same conditions.

"That's just the point," he remarked. "Machines are not operated under the same condition. One man keeps his machine well oiled with a good lubricant, and he gets good service, and another farmer oils his machines, but he doesn't do quite such a thorough job----consequently he doesn't get the maximum service at the minimum cost. In prolonging the useful life of farm machinery I would say that lubrication, adjustments, timely repairing, and housing are all important factors."

The lubrication of farm machinery is important. A fast passenger train develops a hot-box because the lubrication is bad. As a result of this the train frequently has to stop----wait---and waste a lot of expensive time. The University of Illinois says "Improper and insufficient lubrication is probably the chief cause for machinery wearing out. The instruction book sent with each machine should be read carefully, so that no oiling places will be overlooked. If oil holes are located where they become clogged with dirt, they must be cleaned thoroughly with a wire or nail before oiling. It is not a good practice to put a great deal of oil in an open bearing and then let it go for several hours, because the oil soon runs out, and poor lubrication, wear, and a waste of oil result."

If a machine has been standing from one season to the next, use kerosene first in the bearings to cut the grease, and then put in fresh lubricants. Always select a good grade of oil or grease. Cheap lubricants are often the most costly, because they may contain acids or other substances which destroy the surfaces of the bearings. Never allow oil and grease cans to remain uncovered, for they collect dirt and grit. The purpose of lubrication is to reduce friction and wear of the parts; therefore an oil film must be present between the moving parts all the time.

The agricultural engineer next took up the adjustments of farm machinery He said this was very important. Not the adjustment of a mower blade to make cut high or low, nor the adjustment of a plow to make it plow deep or shallow, but the adjustment of the entire machine to make each part function properly, without friction, and at the lowest minimum cost. This means that even the handles on a plow ought to be tight, and every nut and bolt on the plow the same way. Mowers, rakes, binders, threshers, cultivators, and all farm

machinery ought to be kept tight and in good condition all the time. Excessive play or wear of bearings, cutting mechanisms, and all moving parts, particularly those having a high speed, should be guarded against. Adjustment is an important item in the care and life of farm machinery.

"A stitch in time saves nine," is an old adage well worth remembering when it comes to the repairing of farm implements. Timely repairing is a money saver in nearly all industries. When a locomotive engineer brings his big mogul in off of a run, he makes a written report to the master mechanic as to what ought to be done before she starts out again. These reports are attended to immediately, or, they are tagged so as not to be forgotten. That might be a good system for farmers to follow in the repairing of farm machinery. When the binder makes its last round for the season, put it up where it belongs, grease and oil such parts as need that treatment, loosen or remove the canvases and then tag all parts needing replacing, adjusting, or reworking. Do that while the defects are fresh in your mind, like the engineer does, and then they won't be forgotten or overlooked.

The fall of the year is the ideal time to make note of repairs. That's when machines are being laid up for the winter, and winter is a good time to make these repairs and have them ready so that no time will be lost when the machine is needed for spring work. This is the 11th day of March, and there is still time to make these repairs in case they were not made during the winter, but the airplane pilot warms up the engine on his plane several minutes before he goes up, and it's good economy to crank up the old tractor, look over the gang plow, and scrape the rust off of the chopping hoes before the bright spring morning you expect to put them in to service.

I might add that if you have a popular make of tractor it would be wise to check up on the coils and see if they are present. Sometimes they are 'borrowed' for use in automobiles, and just now and then the borrower forgets to return them.

This brings up another important point----and that is the borrowing of farm machinery and tools. No objections to borrowing----not at all---- but it's well to have the machine in the shed, or at least know approximately where it is when you are ready to use it.

Summarizing Mr. Cuming's statements we have not one, but 4 things that enter into the care and life of farm machinery. I'll repeat them again---- Lubrication, adjustments, systematic or timely repairing, and housing.

Now, does it pay to take care of farm machinery? From an economical standpoint it certainly does. It prolongs the life, increases the efficiency of the machines, eliminates many costly delays at critical times during the planting and harvesting seasons, prevents skinned hands and ugly words, and helps the farmer to produce crops at a lower unit cost, and this is needed under our present agricultural conditions.

"THE OPERATION AND CARE OF THE COMBINED HARVESTER-THRESHER," is the title of Farmers' Bulletin No. 1608-F. It's free for the asking, and chock full of brand new information on the care, treatment, and operation of that big piece of farm machinery. If you need assistance with your other farm machinery consult your county agent, your State College of Agriculture, or write directly to the United States Department of Agriculture, Washington, D. C.

Some of our listeners recently have been failing to include their complete addresses when they send in requests for Department of Agriculture publications. Please remember to give your rural route number or your street number and your city, or postoffice when you send in requests for these free publications.

Next week I'm going to talk to you about selecting the brood mare so that she will return a profit on the average farm.

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CLOSING ANNOUNCEMENT: You have just listened to Your Farm Reporter give one of the regular Farm Reporter programs which come to you from this station every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. Write this station for a free copy of Farmers' Bulletin No. 1608-F, "THE OPERATION AND CARE OF THE COMBINED HARVESTER-THRESHER."

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Wednesday, March 12, 1930.

NOT FOR PUBLICATION

Speaking Time: 10 minutes

Poultry Interview No. 26: RAISING TURKEYS AT A PROFIT

ANNOUNCEMENT: Your Farm Reporter at Washington turns today from chickens to turkeys. He's been talking turkey with Mr. A.R. Lee, Department of Agriculture poultry husbandman. And now he brings you some tips on raising turkeys--- and raising them at a profit. Well, Mr. Reporter, what are the prospects for profit this year?

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I suppose you might ask, "Can turkeys be raised at a profit?"

As I remember it, turkey production increased about 10 per cent in 1929, and prices for Thanksgiving and Christmas turkeys were not very high. In fact prices were several cents a pound under 1928 prices, and I remember hearing that the spread between turkey and chicken prices was the smallest it has been for years.

So some of you who raised turkeys last year might wonder if turkey-raising IS profitable. Some of you might say no. "How about it? "I asked Mr. Lee.

"Well," he replied," good prices and improved methods have created great interest in turkey growing in many parts of the country. And because of high production last year folks who raised turkeys under unfavorable conditions undoubtedly didn't find it profitable. However, the lower prices for holiday turkeys stimulated consumption, and turkey prices have increased materially since the first of the year, with both demand and consumption excellent for this part of the winter. Total stocks of frozen poultry exceed stocks of a year ago, but on the other hand turkey stocks are considerably less than the holdings of last year."

"So there is a silver lining in the cloud," I remarked.

By way of reply Mr. Lee declared that I might safely say that turkey production seems to have a safe and sound place in our scheme of things. "Both in the ranges of the West," he said," where they get bulk production at low cost, and on many general farms in the East, where higher prices return profit even with higher production costs.

But in this year of our Lord 1930 it seems that profits from turkey raising depend very, very largely upon good management. And good management consists very largely of sanitation and artificial-rearing methods. I hope you tuned in last week when I reported to you on growing healthy chicks,

for Mr. Lee says that grow-healthy-chicks rules apply with even greater force to turkeys than they do to chickens.

Remember what those 8 points are? Clean chicks, clean incubators, clean brooder houses, clean ground, clean litter, clean feed, clean management, and clean laying houses. This is the Connecticut grow-healthy-chicks program.

As any experienced turkey raiser will tell you it's only through our new knowledge of sanitation that we're able to raise turkeys at a profit at all nowadays.

And one bit of knowledge that has contributed as much to improvement as anything else is the knowledge that disease is spread through land. We know chickens and turkeys can't be kept together without great possibility of disease infection.

Another big forward step has been the use of artificial hatching and rearing. Mr. Lee tells me some turkey raisers are buying poults from hatcheries the same as they do day-old chicks.

"Artificial methods," he declared," greatly reduce the loss by accident, which is apt to be a big factor among turkeys raised by natural methods. What do artificial methods consist of? Well they're just about the same as poultry growers use in raising chickens. Use brooder stoves in portable brooder houses and keep from 75 to 125 poults in one flock. Divide the range into sections and then move the houses frequently to keep poults on clean land."

"How about blackhead?" I asked. "How about coccidiosis, chicken pox, internal parasites, and so on?

I remembered the time that blackhead took swift and heavy toll in my uncle's flock, practically wiping it out within two weeks.

Mr. Lee explained that turkey growers are fighting these diseases with sanitary methods--- the new efficiency, he calls it.

For instance they know that blackhead disease doesn't cause much loss in chickens. However, chickens harbor the infection and they're a prolific source of the cecum worm which carries the blackhead organism. So that's why the first step in successful poultry raising is to separate turkeys from chickens. They must not range on the same ground. And besides, warns Mr. Lee, keep turkeys away from any land on which poultry manure has been spread.

So all in all, sanitation seems to be the key to the answer of the question, "Can turkeys be raised at a profit?"

However, there are no hard and fast rules governing it. As Mr. Lee pointed out, different turkey raisers use different plans, although they're all based on the same principle. Many of them grow turkeys in colony brooder houses on range. Others build concrete yards in front of long brooder houses to keep poults away from infected soil. Still others have wire-bottomed yards of half-inch mesh through which droppings may fall. A fourth plan is to brood young turkeys in sand or gravel yards, which can be kept sanitary through frequent cleaning and replacement with fresh sand.

In any case get the turkeys out on range by the time they're 8 to 12 weeks old, Mr. Lee advises. Artificial rearing gives them a good start, which is the main thing, and after that they need the open but clean, range.

Of course other important factors enter into successful turkey raising, such as feeding, management, and control of minor ailments. All these details are taken up in the Department of Agriculture bulletin on "Turkey Raising," Farmers' Bulletin No. 1409-F.

As to breeds, Mr. Lee tells me that Bronze is still by far the leading breed. Over one-half of our purebred birds are Bronze turkeys. The White Holland variety ranks next and seems to be getting more popular. Then come Bourbon Reds and Narragansetts, with Reds outnumbering the Narragansetts about 2 to 1.

The present trend indicates that turkey raising may become more highly specialized in the future. Then the commercial grower may no longer carry his own breeding stock, but purchase the young poults from a nearby hatchery. Turkey prices may be somewhat lower on account of better methods, but production costs are likely to be lower also, as we eliminate some of the hazards of the business.

If you were NOT successful with turkeys last year, take Mr. Lee's advice and try again. But first ask your State Agricultural College or the United States Department of Agriculture for their information on the subject. I'll be glad to get you that bulletin on "Turkey-Raising." And remember-- now is the time to start a sanitation program if you want roast turkey on your table next fall.

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ANNOUNCEMENT: The number of that bulletin on "Turkey-Raising" is Farmers' Bulletin No. 1409-F. Address Your Farm Reporter at Station_____or at the United States Department of Agriculture in Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Thursday, March 13, 1930

Cooperation Inverview No: 26 : Co-op Reserve Funds.

ANNOUNCEMENT: This is the day your farm reporter at Washington brings us word about the doings of co-ops. He has been talking to the co-op business experts of the Federal Farm Board. They have been giving him a peep at the inner workins and showing him some of the things which make the wheels go around in the successful co-op. For instance, today he is going to give us a report on reserves and reserve policies --- Well, Mr. Reporter? ---

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Most folks have been brought up on this old idea that we should lay aside something for the proverbial rainy day. Many of us never do it. We take a chance on all the days being sunny days. Then some of us lay aside a little something; but when it rains, it pours. We don't lay aside enough.

That is the way it has been with a lot of farmers' co-ops. But from what Mr. J. E. Wells, Jr., of the cooperative marketing division of the Federal Farm Board tells me the really successful farmers' associations have generally been those which had a good, sound reserve policy. They have kept enough in reserve funds to tide them through the rough weather.

In the past, a number of farmers' organizations have come to grief because they have lived from hand to mouth with the management and members trusting that nothing unforseen was going to happen. That has occurred, Mr. Wells tells me, in the case of some of the associations of the pooling type.

Often, they have paid back everything to the members at the end of the season and then borrowed money to run on until returns from the next crop begin to come in, counting on paying out of them. But delays or an unusually big crop may run up expenses; may take more than the management counted on. Mr. Wells says an association of that kind needs enough capital to pay their own operating expenses for at least one year.

Co-ops which make a fixed charge for their services, must estimate what the season's operations are going to cost, and figure accurately ~~enough~~ not only to come out even, but to create a reserve. When the chief items of expense are salaries, rent, and the like, Mr. Wells figures that the co-op should have a reserve account equal to at least one year's operating expense.

Now, the Southern Rice Growers Association was a co-op which had a nice reserve of some $50,000 at one time. That looked like a pretty plum to a lot of the grower members. They couldn't see why that $50,000 shouldn't be divided out among them, as a refund. The board of directors were caught between their desire to satisfy the members and their wish to keep a substantial reserve for emergencies. They decided to please the members and

take a chance.

Well, when the financial storm came and beat against that organization, it went down. The management didn't have enough to pay off the hands. Several of the employees sued the co-op for back wages and forced it into bankruptcy. If they had kept a year's expenses in reserve, they would have dodged that.

Mr. Wells points out that keeping that proper poise or balance between returns to the growers and reserves is one of the biggest problems the directors have.

He suggests that the best thing to do is to play safe. If it is a question between the members and the association better make a mistake on the side of conservation in estimating the needs of the association and keep a little more in reserve.

Members should remember, Mr. Wells says, that the members are the association and the association is the members. The members can best be served by making the association secure. It is always a temptation for the directors to please the members with liberal returns to them. But too lax a policy of estimating the probable liabilities of the co-op, may, and, often has, brought financial disaster.

When a co-op is going into new business or taking on some new service, it is always well, Mr. Wells holds, to set aside an extra reserve to take care of any contingency which may come up, but which can not be foreseen.

Often the management gets very enthusiastic over the prospects of some new scheme before they know all the pitfalls and risks they are likely to run across. The reserves should be provided not only to take care of any expenses which conservative judgment would indicate may come up, but an additional factor of safety needs to be provided for. The co-op should protect itself even against errors in conservative judgment, Mr. Wells says.

Then besides the reserves to take care of unexpected or unforeseen contingencies, reserves are also needed to take care of the general depreciation of buildings, machinery, and the like. From the day the business is set up, such things gradually wear out or become obsolete. Something must be set aside to take care of these losses. The reserves should be kept in such form that they will be readily available for the use for which they are set aside.

Often co-ops are faced with the chance to go into some new line or branch of marketing service. Many such ventures, Mr. Wells cautions, entail hazards which may impair the very life of the organization.

No association, he says, should go into such ventures without taking thorough stock of the risks it runs. If the risks are greater than the financial ability of the association to carry them on, or if their operation would impair the reserves or capital already provided in the association for legitimate operations, the co-op should stay out of the new ventures until it has acquired enough reserve or adequate capital.

Going into a hazardous business, knowing in advance that you are taking big chances, without providing for big enough reserves not only to take care of the operation of the new venture but for possible losses, cannot be justified in any organization, Mr. Wells declared and added that that is especially true in the case of a farmers' cooperative marketing association.

A co-op should analyze its business in all its branches in order to find out what reserves are needed to protect every phase of probable loss. Some losses are certain. Others are uncertain in amount but inherent in every business. Reserves should be established to take care of such contingencies.

Co-ops now being formed are taking these things into consideration more than ever before. They are getting started on a sounder basis than has been the case in many co-ops organized in the past. As a result, Mr. Wells holds, instead of being mere fair-weather associations, the soundly financed co-ops will be in a position to render their members the maximum service in spite of temporary changes or reversed which may come.

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ANNOUNCEMENT: Your farm reporter at Washington has just reported an interview with Mr. J. E. Wells, Jr., of the cooperative marketing division of the Federal Farm Board. This is one of a series of programs presented by Station_____through cooperation with the United States Department of Agriculture.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Friday, March 14, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes.

Dairy Interview No. 26: STORIES FROM COW-TESTING FIGURES

ANNOUNCEMENT: At this time Your Farm Reporter at Washington brings you stories from the Book of 101 Tables. He's been chatting this week with Dr. J. C. McDowell, veteran dairyman of the United States Department of Agriculture. And whenever he chats with Dr. McDowell he brings us interesting stories of the doings of dairymen and dairy cows. All right, Mr. Reporter, once upon a time what?

****

Have I told you about the Book of 101 Tables? It's a big black notebook---looks ordinary from the outside---but inside it's really extraordinary. In it you find tables of figures on almost anything you want to know about dairy cows:

Actually it contains about 150 tables now, and it may not be long until it will be the Book of a Thousand Tables.

As most of you know already Dr. McDowell is in charge of dairy herd improvement work of the Department of Agriculture. Dairy Herd Improvement associations all over the United States sent him reports regularly, and that's where he gets most of his figures.

I sat down across the table from him and thumbed through this extraordinary notebook. Right away I find one table that speaks for itself--it speaks a sort of thumb-nail history of cow-testing the world over.

It seems that the first genuine cow-testing associations grew up in Denmark, back 35 years ago in 1895. Germany and Sweden joined the procession almost immediately, but the United States waited 11 years, until 1906. England waited until 1914, the year of the World War.

I note from this table that Denmark is still ahead of us in many respects For instance 31.3 per cent of all dairy cows in Denmark are tested while only 2.3 per cent of our dairy cows are on test. In fact, most countries are ahead of the United States on this score. Twenty per cent of the dairy cows in Holland are tested; 16.8 per cent in Scotland, 11 per cent in Sweden; 9.8 per cent in Germany. Only France and Belgium have a smaller percentage than our 2.3.

And considering the cows on test---924,000 in Germany, 473,000 in Denmark and 465,000 in the United States---both Germany and Denmark lead the

United States in average milk production. Denmark's average cow produces in one year 7,509 pounds of milk, Germany's 7782 pounds and ours 7464 pounds.

However, the United States leads the world in average butterfat production of tested cows. The 465,000 cows in our dairy herd improvement associations averaged 295 pounds in 1928, which is 14 pounds above Denmark's average and 41 pounds above Germany's.

Of course that's just for cows that are tested. Taking average production of all cows, on which we have no exact figures, we'd probably drop toward the bottom of the class, since so few of our cows are tested.

Now here is a VERY interesting table. If we get a surplus of dairy products in this country this table would show us just how much culling we'd have to do to bring production down to the required point.

The figures are from the 1929 records of dairy herd improvement associations. Dr. McDowell took all the average herds, that is herds averaging between 150 and 199 pounds.

Now when you cull out the lowest-producing 1 per cent of your cows, these figures show that you don't cut out nearly 1 per cent of your production. In fact you cut production only one-fourth of one per cent. When you cut out the lowest 2 per cent you reduce total production only 65 hundredths of 1 per cent. Cut out the lowest 10 per cent and you cut production only 5.1 per cent. And taking out 20 per cent of the cows at the bottom cuts the total milk and butterfat supply only 12.3 per cent.

Now Dr. McDowell has figured out what this means on the basis of the country's total supply. We'll say all dairymen cull out the lowest 1 per cent of their cows. He's figured out that this would be almost exactly the equivalent of 1 days' supply for the United States. Cutting out the lowest 2 per cent would take away the supply of 2.4 days; cutting 10 per cent, 19 days, and 20 per cent more than 45 days.

In explaining this table Dr. McDowell made a remark that I noted down and underlined. "You can safely say, "he declared," that we could cull out the lowest-producing one-third of our cows and still lose very few, if any, profitable cows. We lose money now on the lower third. The second third just about plays even. And practically all our profits come from the top third."

"Now here's a table," he went on leafing through the book," that shows the effect of culling the lowest 10 per cent. This table takes the 1929 records of 2,149 cows. Their butterfat average was 187 pounds and the average of the 10 per cent culled was 96 pounds. The cows making up this 10 per cent returned an annual income over feed cost of $25 per cow."

Any dairyman knows that $25 a year will hardly cover overhead costs, and costs of labor. So the returns from these cows would have to go down in red ink.

Those figures were for grade dairy cattle but the same thing holds true of purebreds, according to Dr. McDowell. The records of purebred cows show that if dairymen culled out the lowest 10 per cent they would increase the average butterfat production of the cows in their herds by approximately 20 pounds per cow. They would increase income over feed cost by approximately $10 per cow.

They would be culling out cows whose average production is around 170 pounds of butterfat a year and whose income over cost of feed is around $50. And, as Mr. McDowell says, it takes a vivid imagination to see any profit in providing a cow with a warm stable and milking her two or three times a day, in addition to other labor for $50 a year.

So even in purebred herds we could profit by culling out the lowest 10 per cent, at least.

Speaking of purebreds and grades, here's a table on the 1928 records of purebred and grade dairy cows of all ages, nearly 37,000 purebreds and almost 75,000 grades.

According to the complete figures the purebreds topped the grade in milk production by 782 pounds per cow, or 10.6 per cent. And in butter fat by 26 pounds per cow, or 9 per cent. Purebreds returned $16 more per cow income over feed cost than grades, a difference of 14.7 per cent.

Sometime soon I'm going back and look through the Book of a Hundred and One Tables, when I can stay longer. And then I'll bring you some more of Dr. McDowell's stories. In the meantime, remember what he said about culling: That we may cull out at least the lowest 10 per cent, and probably a good deal more than that, without losing a single profitable cow.

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ANNOUNCEMENT: Your Farm Reporter at Washington has just brought you his regular Friday report to dairy farmers. For further information along the line of today's report you might write him for the bulletin on "Dairy Herd Improvement," Farmers' Bulletin No. 1532-F. Address him in care of Station____ or in care of the United States Department of Agriculture in Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Monday, March 17, 1930

NOT FOR PUBLICATION

Speaking Time: 10 minutes All Regions

HOW TO TAKE CARE OF FARM HARNESS AND LEATHER

OPENING ANNOUNCEMENT: Leather is good or it's bad, depending first, on what kind of leather it is; and second, on what kind of care and treatment it receives while in service or storage. Your Farm Reporter has just had a talk with Uncle Sam's leather experts. They told him how to select good leather, and ~~then~~ how to take care of it. Your Reporter is going to give us some of the high points in that interview at this time in his regular Reporter program which comes to you from this station every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. All right, Mr. Reporter.

*****

A linesman nimbly spiked his way up a telephone pole. Then with careful hands he snapped his leather safety belt around the pole and began splicing a broken wire. Without warning his leather belt broke and he fell backwards to the ground breaking his collarbone and fracturing one arm.

The leather safety belt was fairly new of heavy construction and well-made and apparently in good condition. The telephone company was at a loss to understand why it should have broken so easily and without the slightest warning. The pieces of this broken belt were mailed to the United States Bureau of Chemistry and Soils with the request that a chemical examination be made to try to ascertain why it broke so easily while apparently in the pink of condition.

Mr. R. W. Frey, one of Uncle Sam's leather chemist investigators found that the safety belt broke because it had been burned while wet, as by leaning with it against a hot pipe or stove while getting warm. Wet leather burns readily; much more so than dry leather. A temperature but slightly hotter than the hand can stand will injure wet leather. The breaking of this particular leather belt was not the fault of the belt, but the result of abuse.

I asked Mr. Frey if leather goods were generally abused, and he replied that they were. He said that leather will give good service when properly tanned, and properly cared for during use.

Mr. Frey has been in Uncle Sam's chemical service for 16 years and during that time he has gathered a lot of information about harness and all kinds of leather goods.

Here is what he said about selecting farm harness, or harness for any purpose, so far as that is concerned. "The life of a harness depends to a great extent upon its quality and workmanship, and the care that it receives."

Harness that is too heavy for the work is more economical than harness that is too light. In the selection of farm harness pay special attention to the lines, breeching, holdback straps, tugs or traces, belly bands, and yoke straps. These should be sufficiently strong and heavy enough for the work required. Weak tugs and weak straps will not stand up under heavy work, neither can a runaway team be stopped with weak lines.

"In selecting harness, examine the leather carefully to see that it has no cuts, holes, brands, thin places, soft spots, or other physical imperfections that impair its strength. New harness leather that shows cracks on the grain side when it is sharply bent is practically WORTHLESS, and the presence of cracks in old harness shows that it is deteriorating. Harness leather should be pliable, not stiff. It should not feel harsh and dry. It should contain from 20 to 25 per cent grease, for protection, preservation, and strength."

Sewing is an important part of harness, so I asked Mr. Frey to tell me about that.

"Sewing," he said, "should be consistent with the weight and type of the harness. It should be done with sufficiently heavy thread and sufficient rows of stitches to stand the strain. The needle holes especially should not be so large and so close together that the thread will readily cut through the leather. The riveting and fastening of buckles, rings, snaps, and other metal parts should be secure, so that they will reamin solidly in place."

Next I asked Mr. Frey to tell me about taking care of harness, and this is the way he opened up on that subject:

"Neglect of harness is costly! Breaks and rips should be promptly and properly repaired. Makeshift jobs are but temporary and go from bad to worse. Harness should be kept clean, especially the leather parts, which should be WASHED AND OILED FROM TWO TO FOUR TIMES A YEAR, depending upon the conditions of use. The useful life of harness can be doubled and quadrupled by such treatment."

When you double the life of harness the cost is cut in two. Some farmers by taking good care of their harness get excellent service from a set of harness for 25 years or longer. Harness on many other farms lasts only from 3 to 8 years .

Just suppose a farmer buys a set of harness for his two horses today. By way of comparison we'll say the set is valued at $75. If the harness lasts 5 years the cost per year will be $15. Now if by taking better care of this set of harness, it is made to last 25 years,------then the harness cost decreases from $15 per year to $3 per year.

Mr. Frey's information was rapidly taking a very practical turn, so I asked him to tell you radio listeners just how to grease and oil harness.

Here's his answer:

"Clean the harness with luke-warm water and a neutral soap, such as castile or white toilet soap, using a sponge or fairly stiff brush. Scrape off cakes or hardened grease or foreign matter with a dull knife. Rinse in clean, warm water, and hang the harness in a warm room until it is no longer wet, but is still damp. Then oil the harness and leave it in a warm place for 24 hours before using it. Harness should be oiled or greased while still damp; otherwise it may absorb so much oil or grease that it will pull out of shape or will become so greasy that it will take up sand and grit, thereby injuring the leather as well as spoiling its appearance. Harness should never look or feel greasy."

In my final question I asked Mr. Frey to tell you what kind of grease and oil to use in taking care of the harness. This is what he said:

"Neat's-foot oil or castor oil, or a mixture of these with wool grease, is a good dressing for driving harness. For heavy harness a mixture of tallow and cod oil, neat's-foot oil and tallow, or any or all of these with wool grease, in a paste of about the consistency of butter, is beneficial. Apply the grease lightly to driving harness and liberally to work harness. Rub the oil or grease, warm to the hand, thoroughly into the leather while it is still damp from washing. After the harness has hung in a warm place over night remove with a clean, dry cloth any oil that the leather has not absorbed."

I had hoped to tell you something about leather belting and other kinds of farm harness, but my time will not permit a further discussion of the subject now.

In conclusion I want to suggest that you harness users write this station for a copy of Yearbook Separate No. 1034-Y. This leaflet takes up the selection, care and treatment of leather harness in a practical manner.

Now for you radio listeners who use leather belting, you'll find a lot of practical information on selecting, care and treatment of leather belts for power transmission in Yearbook Separate No.1033-Y.

Now for lawyers, bankers, doctors, school teachers, preachers, stock market investors, and all the rest of you radio listeners,---you'll no doubt be interested in a new bulletin entitled "LEATHER SHOES." It's Farmers' Bulletin No.1523-F, and free for the asking.

At this time next Monday I'll be back with you again, and at that time we'll talk about taking care of farm machinery.

CLOSING ANNOUNCEMENT: You have just listened to the regular Farm Reporter program which comes to you every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. The Reporter mentioned "LEATHER SHOES," which is the title of Farmers' Bulletin No.1523-F, Yearbook Separates No.1033-Y, on "LEATHER BELTING," and 1034-Y, on "SELECTION CARE AND TREATMENT OF FARM HARNESS." Write this station for free copies of any of these publications.

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Tuesday, March 18, 1930.
(Regions 3, 4, and 5)

Crops and Soils Interview No. 27: Farm Grain Storage

ANNOUNCEMENT: Your farm reporter at Washington has been to see Mr. E. G. Boerner, grain specialist of the United States Department of Agriculture, Bureau of Agricultural Economics, about farm grain storage. He is now ready to make his report; ---- All right, Mr. Reporter, we are all ready!------

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It is very plain why we hear more about farm storage of grain than we used to hear. There are two main reasons. One is the combine. The other is the paying of premiums for high-protein wheat.

These two things, Mr. E. G. Boerner, of the Grain Division in the Bureau of Agricultural Economics of the United States Department of Agriculture, tells me, have emphasized the need of more farm storage of grain. As some of you know from experience, when there is a jam in the grain market, we often need more storage and need it badly.

Of course, it is up to every farmer to decide for himself whether he will store grain on his farm or how much of his grain he will store on his farm.

But, as Mr. Boerner pointsout, nowdays the combine is being used more and more for harvesting small grains. Most of the grain in any one section is ready for harvest with the combine about the same time. As a result, a large volume of grain is being threshed in a short time and rushed to market.

That puts a big strain on the railroads and country elevators.

It taxes them to capacity and beyond to handle it. Many of the country elevators will pay for wheat, for instance, according to the amount of protein in it; when they can. But during the rush season, they can't do it very easily. It is usually impossible for them to bin the wheat according to its protein, or to condition, or clean, or mix the grain to the best advantage as fast as it is received from the farms and shipped to the terminal markets.

For that reason, it often pays the farmer to store the grain at home until the elevators are in a better position to handle it according to protein, so as to get the premium; if he has wheat that will bring the special price. He can fine that out by testing on the farm, before he starts to move it.

Of course, if you don't haul the grain to the local elevator or the

mill right away, you have to put it somewhere. If you just pile it anywhere, you are going to lose a lot from weather damage and the like. If you pile it on the ground, you will get gravel and dirt in the grain, so that when it gets to market it will sell as sample grade at a whole lot less than clean grain would have brought. Yes, Mr. Boerner insists that it is best to use properly built grain bins.

"They cost money to build?" I suggested.

"Of course," he said, "there are some expenses to storing on the farm. But there are some decided advantages, too."

"What are those advantages — and disadvantages?" I asked him.

"Well," he went on, "the chief advantage lies in giving you a chance to market your grain — the same grain you grow — at a time when you think the market is at its highest point."

Farm storage of grain makes for this "orderly marketing" we hear so much about these days. It keeps down car shortages and embargoes. And, if that doesn't come near enough home to you, storage on the farm reduces labor costs, and permits the drying of damp grain and permits marketing grain when the premium prices are favorable.

The chief costs are the cost of the original bin and storage facilities. That is a cost that in the long run is spread out over a number of years. And, it may be well to bear in mind that when grain is stored in elevators and at terminal markets, there are considerable storage costs that must be paid by somebody.

But to get back to the expense of storing on the farm; there is a certain amount of interest and depreciation on the investment you have to take into consideration. Then there is interest on the value of the grain during such time as it is held and a small shrinkage in weight. Then there is the added expense of binning and re-loading.

On the other hand, Mr. Boerner says that if your farm is located at some distance from your local market, it will take less help to move the grain from the combine or threshing machine to the farm bin than it takes to haul the grain direct to the local market. With a lot of you that "help" means hired help. Often one truck or one team and driver can haul your grain from your combine to your farm storage bins, when it would take two or more trucks or teams and men to haul the stuff to market as fast as it is threshed.

That's true in the case of the threshing machine as well as the combine. It usually takes fewer men and trucks or teams to get the grain to the farm storage than it does to haul it to the elevator. If you put your grain in storage on your own place, you can later haul it to your local market yourself and so save the extra expense of hiring trucks and help.

Another thing, farm storage gives you a chance to clean the grain on the farm. You can keep the dockage and other foreign material you get out of the grain on the farm. Then you won't have to pay for haul-

ing stuff to market that will just bring down the price if you leave it in.

Mr. Boerner says that very large quantities of wheat and other grains arrive at the terminal markets each year in a cool condition, but fail to meet the requirements for top grades on account of too much moisture. And, in addition, a lot of high-moisture grain gets to market in a musty, sour, or heated condition. Such grain takes a discount when it is sold.

Too much moisture in the grain is the result of combining or threshing while the grain is damp. Often that can be avoided by waiting until the grain is dry. But sometimes, there is so much rain or stormy weather, you can not wait until the grain is thoroughly dry before starting. If the grain contains only a little too much moisture, it can be dried in farm storage bins built with ventilators spaced fairly closely together.

And, by the way, Mr. Boerner has prepared a paper which gives some suggestions for building various kinds of farm grain storage bins, including ventilated wheat bins. That paper also points out the advantages of farm storage we have mentioned as well as others. You can get it free from the U. S. Department of Agriculture. Just ask for Leaflet No. 46-L on "Farm Grain Storage."

By storing on your farm, you have a chance to sell when you think the time is ripe to sell. You can study the supply and demand conditions, you can observe the price trends, and then sell your grain on what you consider to be the most favorable market. That, Mr. Boerner, points out, is particularly important in years of big crops in which there is also a big carry-over of grain from previous crops in store in elevators.

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ANNOUNCEMENT: That publication mentioned can be had free of charge either by writing to this Station------ or by writing direct to the United States Department of Agriculture at Washington, D. C., with which we cooperate in presenting these programs. Ask for the leaflet on "Farm Grain Storage." It is Leaflet No. 46-L.

UNITED STATES DEPARTMENT OF AGRICULTURE
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YOUR FARM REPORTER AT WASHINGTON
(Regions 1 and 2)

Tuesday, March 18, 1930

Crops and Soils Interview No. 27b: The Seed Corn Situation.

ANNOUNCEMENT: Remember those freezes we had last November? Well, our farm reporter at Washington has brought a warning to us from the corn specialist of the United States Department of Agriculture that those freezes produced a serious seed corn situation in the here and now. If you expect a decent crop ------ but I'll let the farm reporter tell you about that-- Go ahead, Mr. Reporter---

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As old Mark Antony used to say, "Lend me your ears."

In this case, I might well mean your ears of corn as well as your listeners-in.

Speaking of ears, however, Dr. J. R. Holbert, corn specialist of the United States Department of Agriculture, suggests to me that human ears and corn ears have at least one thing in common; they are both sometimes damaged by cold weather. But all ears are not damaged the same.

My friends, Ed Smith and Bill Hall were working together outdoors a few weeks ago.------ one of those bitter cold days. Ed got his ears frozen. Bill's were not hurt at all. That's the way, Dr. Holbert tells me, it is with ears of corn. Some strains of corn may have their ears entirely killed by the cold. Others may have only half the kernels killed. Some may not be hurt at all.

That kind of corn that hasn't been hurt at all is the kind to use for seed to plant this year. Of course, those of you who have been used to artificially drying your seed corn may not have to worry. But in many sections, Dr. Holbert says, the seed corn situation this year is serious! If there ever was a time, when we needed to test our seed corn it is now. And now is the time to get busy with our testing.

He thinks there is a very great likelihood of a very large acreage of corn being planted to inferior seed. In many sections, the seed corn shortage is so acute, many farmers may merely ask "Will it grow?" They should bear in mind that other questions; "And how?"

Some of you have good seed. Some of you don't have seed. A lot of you can get good seed, in your locality. But some of us are going to have to make a definite search for corn seed outside our locality.

But Mr. Holbert cautions us to get seed adapted to our soil conditions. Corn grown even close by may not fit our farms. As a rule, Dr.

Holbert tells me, corn grown on the more productive soil is apt to be more cold resistant and suggests we try to use seed from well-matured corn grown on good soil.

He says there are no doubt first-rate sources of corn supply dotted all over the corn Belt. The question is to find where they are, And remember even when a germination test shows that the corn will grow, it may not grow so well, on your place if it is not adapted to your conditions of soil or the length of your growing season. He thinks many of us are doomed to disappointment when we harvest the crop, if we fail to take these things into consideration.

He especially advised against using two or three year old corn for seed. As some of us know from experience if we put two year old seed in the cold ground, it will be dead. That will mean replanting. And who wants to replant? It is poor business, if you can get around it.

"To get the kind of seed you advise," I complained, "will cost us more?"

"Well," Dr. Holbert replied, "the lowest price seed is not always the cheapest in the long run. It may prove the most expensive when it fails to give you a good harvest next fall. Although you may think a bushel of good seed corn costs too much, one bushel of seed corn will plant from 6 to 10 acres --- that's more than you can plant from any other grain crop with a bushel of seed. If you figure by the acre and the probable difference in yield between good and not-so-good seed, you will see it will pay to select your seed with care even if it does cost more."

"How about seed treatment?" I asked.

"Seed treatment is a very valuable piece of insurance against poor stands following bad weather," he replied. "For information on chemical dust treatment for dent seed corn, why don't you write the United States Department of Agriculture for its Circular No. 34-C. Seed treatment may be considered first aid to the young corn plant. However, seed treatment can not bring to life corn kernels killed by the cold. The first thing you need is a germination test."

Then he went on to explain that in order to get a preliminary notion as to whether our seed corn has been killed entirely or only slightly injured, it would be a good idea to make a collection of about 500 kernels from ears selected at random from our seed corn. A germination test will tell whether those samples will sprout. The seed injured by freezing either will not sprout at all or will sprout very weakly. If you don't know how to make such a test, better write for the bulletin on germination tests. Ask for Farmers' Bulletin No. 1176-F.

Dead seed is, of course, entirely worthless for planting. The seed which has been so damaged by freezing as to germinate only very weakly, if used for seed, usually produce seedlings that are very susceptible to disease --- weak and spindly. Such corn is likely to be slow-growing through the season and produce an unsatisfactory yield.

If your preliminary test shows your corn is dead, the only thing to do is to get some good seed somewhere else. If only about half the kernels germinate weakly or not all, Dr. Holbert suggests that we work the whole seed lot very carefully, ear by ear; using what we used to call the old jack-knife test.

That is, pull out several kernels with a knife and take a look at the germ. If the germ is soft and discolored, you can be pretty certain that seed wouldn't grow if you did give it a germination test. If four to eight out of every ten ears you test that way with the jack-knife are obviously weak and questionable, why go to the trouble of giving them a germination test, better feed that corn to the pigs.

However, don't rely too much on the jack-knife test in a year like this. When you have selected ears which look promising as seed ears give each ear an individual germination test. If there ever was a year, especially in the southern part of the Corn Belt, when there was need for germination tests by the community, or by high schools, or for custom testing, it is this year.

Of course, it doesn't improve corn to pull out kernels with a jack-knife or to put it on a germinator, but it gives you a little idea as to what that corn will do. As Dr. Holbert says your first aim should be to get corn which will grow; but in all your getting get seed adapted to growing in your locality, to your soil, to your corn growing season.

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ANNOUNCEMENT: That bulletin on the germination testing of seed corn is Farmers' Bulletin No. 1176-F and the circular on chemical dust treatment for dent seed corn is Circular 34-C. You can get these publications free either by writing to this Station ------- or by writing direct to the United States Department of Agriculture at Washington, D.C. with which this Station --------- cooperates in presenting these reports from your farm reporter at Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON

Wednesday, March 19, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes

Poultry Interview No. 27: FEEDING AND BROODING BABY CHICKS

ANNOUNCEMENT: Now Station___ presents again Your Farm Reporter at Washington who brings you today his weekly report on poultry. He's been talking with A. R. Lee of the Department of Agriculture, about feeding and brooding baby chicks. And he brings you now a report on recent developments along those lines. All right, Mr. Reporter.

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A lot of water has run under a lot of bridges since we first began to feed and brood baby chicks. But there weren't many important changes until a comparatively few years ago.

"What are some of these recent changes?" I asked Mr. Lee.

"Feeding cod-liver oil is one," he pointed out," and I'd be inclined to say it's one of the most important ones. We've found that chicks raised indoors or hatched early in the season don't get enough sunlight, and cod-liver oil acts as a good substitute. Of course when the chicks get out on range later in the season they don't need oil anymore."

You're all well acquainted with the uses of cod-liver oil. But there's another change maybe all of you aren't so familiar with. It has come still more recently, and it has come as the result of feeding investigations. These investigations show that there's no good reason for withholding feed from chicks for 2 or 3 days after they're hatched. We know now that chicks fed from 24 to 48 hours after hatching make better growth than if you wait until they are 60 to 72 hours old.

In other words feed chicks as soon as they come from the hatchery, Mr. Lee advises. Or if you hatch them yourself, leave them in the machine for at least 24 hours after hatching and then feed them as soon as you transfer them to the brooder.

Mr. Lee remarked that scratch or chick feed isn't fed to baby chicks as much as it was a few years ago. Poultrymen are now starting chicks on mash, which is fed for at least 2 or 3 weeks before the chick feed is added.

Nowadays many poultrymen prefer to feed mash alone even longer than two or three weeks. And some of them use an all-mash system. where chicks are raised all the way to maturity without scratch feed. I guess there are very few poultrymen any more who mix their own chick scratch or chick grains. They depend on commercial-mixed chick feeds until the chicks are large enough

to eat wheat and regular cracked corn. As to mashes both home mixed and commercial mixed are pretty commonly used.

Another development is the growing use of milk in the chick diet. We're beginning to realize how valuable milk really is, and almost all chick mashes today either contain milk, or else milk is supplied as a supplement in liquid form. Milk in the chick ration gives better growth and frequently lessens the mortality.

A few years ago you'll remember that most of the poultry bulletins said "Do not overfeed your chicks." Well we've learned something since then. Now they say to provide at least an inch of hopper space for each chick so that each chick can get all the feed it wants. Mr. Lee points out that better rations and better management have largely done away with the danger of overfeeding chicks.

Somebody writes in to ask if hard-boiled infertile eggs from incubators make good chick feed, so I asked Mr. Lee about it.

He replied that they do make good feed, with one provision. And that is if they're kept in boiling water at least 5 minutes to kill disease germs that may be harmful to the chicks.

Now as to brooding. Brooding chicks is usually considered the most difficult part of the poultry operations. At least most poultrymen seem to think so. Laying hens will stand considerable neglect without great injury, but one day's neglect in the brooding and feeding of chicks may ruin the entire brood. The brooder should be running and properly regulated at least two days before the chicks arrive.

Mr. Lee gave me a few ideas about brooders that I'll pass on to you.

First he especially emphasized sanitation. He declares that sanitation in brooder houses is even more important than sanitation in the laying houses, and you know how important it is there. Clean and thoroughly disinfect all brooders and brooder houses before you put chicks in them, he advises.

He suggests also that you put up a wire screen about a foot high, around and about a foot outside the brooder to keep the chicks near the heat. A temperature of about 95 degrees just inside the edge of the hover is a good temperature for the first few weeks, after which it can be gradually reduced.

"How about the heat when chicks are started in battery brooders?" I asked.

"Start at the same temperature but gradually lower it after one week," he replied. "Where chicks are started in battery brooders and after three weeks are put in colony brooders, they have to be taught to use the new brooder. Confine the chicks around the brooder until they learn to use it for warmth.

"Chicks can get away from heat if it's too warm, but they'll crowd and suffer if heat is insufficient."

"Crowding chicks in a brooder," he went on, "is an expensive method of brooding. You'll usually get better results by keeping 350 chicks under a 500-chick brooder, instead of 500 chicks.

"Shavings, sand or peat moss make good litters for the brooder. And to keep chicks in the best of health, change the litter at the end of the first 10 days and then every week thereafter.

Mr. Lee is often asked about toe picking, which as every poultryman knows is a bad fault in chicks, especially when they're brooded in large numbers. This fault must be watched carefully or serious loss may result. Remove chicks immediately which are picked, and daub the picked places with coal tar or a similar product. And then keep them out of the pen until they have stopped bleeding.

How to prevent toe picking? Well Mr. Lee says that regularity in feeding--plenty of feed---addition of green feed---will all help to prevent it. And lastly, DO NOT CROWD chicks. Crowding is one of the big causes of toe picking.

If you want more information on brooding and feeding, here are two bulletins to write for. One is entitled "Incubation and Brooding of Chicks," and the number is Farmers' Bulletin No. 1538-F. The other is "Feeding Chickens," Farmers' Bulletin No. 1541-F.

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ANNOUNCEMENT: You have just heard YOUR FARM REPORTER AT WASHINGTON present his weekly report to poultry raisers. If you want those bulletins write to Your Reporter in care of Station_____or in care of the United States Department of Agriculture at Washington. I'll repeat the titles and numbers once more. Here they are: "Incubation and Brooding of Chicks," Farmers' Bulletin No. 1538-F; and "Feeding Chickens," Farmers' Bulletin No. 1541-F.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Thursday, March 20, 1930.

Cooperation Interview No. 27: The Farmer and the Federal Farm Board.

ANNOUNCEMENT: Your farm reporter at Washington is now ready to report to you again. This is the day he tells us what he has found out from the specialists in the cooperative marketing division of the Federal Farm Board. We asked him to get an explanation of the relationship of the farmer with the Federal Farm Board -------- Well, Mr. Reporter where does the producer fit in this Farm Board picture?

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"In the last analysis, the success of the Federal Farm Board in its operations under the Agricultural Marketing Act is going to depend on the individual farmer."

That is what Dr. Frank B. Bomberger, assistant chief of the Division of Cooperative Marketing, in charge of organization work in the Federal Farm Board, told me.

"Just where does the individual farmer get on?" I asked. "We hear a lot about the farmer and a lot about the Farm Board, but just where do they tie up?"

"Well," explained Dr. Bomberger, "there are some six and one-half million farmers in this country. No matter how hard it tried, the Farm Board couldn't get around to deal directly with each individual. Obviously, the situation calls for some sort of plan for dealing with farmers in groups.

"The very heart of the Agricultural Marketing Act," he went on, "has to do with the activities of the Federal Farm Board in strengthening existing cooperative organizations of producers of agricultural commodities; with helping to create new ones; and with the coordination of all into larger units so they will be more efficient."

"Yes, but Doctor," I said, "what can an individual farmer do to put himself in a position to get any benefits which may come from all that?"

"Obviously, the first step for the producer of any agricultural commodity is to find out whether there is available to him a cooperative association of producers of that commodity which he can join, " replied

Dr. Bomberger.

"In case there is such a local organization, the next thing is to find out whether it is so constituted as to comply with the requirements of the Capper-Volstead Act. That is the standard by which cooperative associations are to be measured in order that they may be recognized by the Federal Farm Board in giving the assistance provided by the Agricultural Marketing Act."

The chief requirements of the Capper-Volstead law are that the association must have only producers as stockholders or members and that the organization be operated for the mutual benefit of its members. Either dividends on stock or membershipcapital must be limited to eight per cent or it must be organized on the one-man-one-vote principle and, in either event, it must not deal in products of non-members to an amount greater in value than the products it handles for its members.

"How can a grower find out if the co-op in his section meets those requirements?" I asked.

"Apply to the co-op itself, or if that seems impractical, ask the extension officers of your State," said Dr. Bomberger, "or," he continued, "you can ask the Federal Farm Board, which will undertake to find out if the growers organization existing in your community has a business set-up which would bring it within the Capper-Volstead Act."

"But suppose we haven't any such co-op in our territory?" I suggested.

"In that case," he answered, "the next logical step would be to discuss with other producers of the same commodity and with the extension agencies of your State whether the situation in your locality or region would justify the organization of a co-op association.

"Very likely such an inquiry would involve the making of a survey of market conditions in that region with respect to volume of business and the like. Such a preliminary study very likely would be made by the extension or marketing specialists of the State, or, if they were not equipped to make the survey, requests for assistance in meeting the problem might be addressed to the Federal Farm Board."

When such requests from individuals or from local groups reach the Farm Board, Dr. Bomberger explained, they, of course, have to be passed on with reference to requests of a similar kind from other regions producing that same commodity, and as to how such a local will fit into the plans already made for local, and regional, associations which can be federated into a national association.

He cautioned us against being dissatistisfied or impatient if our requests don't get an immediate response. Such things take time. For instance, it takes time to bring the producers or grain or livestock or potatoes into agreement as to what should be the essential features of

a national and regional system for marketing such commodities. And even after the general plans have been outlined, there are many technical details which have to be worked out before the actual organization can be set up. The chief thing is that each part of the organization running from the local co-op through the regional unit and up to the national marketing agency shall all be so carefully adjusted that the system will function smoothly and efficiently after it gets going.

"Suppose that the plans have already been formed by the national and state organization to handle a particular farm commodity and that the local has been set up, what can any individual farmer member do then?" I asked Dr. Bomberger.

"Obviously, if the producer hopes to get any real benefit from the Agricultural Marketing Act," he declared, " it is highly important that he exert every effort to make his local organization successful in its operation.

"In the last analysis, the success of the Federal Farm Board in its operation under the Agricultural Marketing Act is going to depend on the individual producers who make up the local cooperative marketing associations which handle the several agricultural commodities.

"The Federal Farm Board," Dr. Bomberger went on, "does not expect to do more than help the farmer help himself. If the individual producer will cooperate with his fellow producers so as to adapt the production of his agricultural commodity to the market demand, both as to quality and as to the supply for which there is any practical demand, he can expect that the marketing system set up under the leadership of the Federal Farm Board will do much to solve the problem involved in marketing of his commodities and to restore agriculture to a basis of economic equality with other industries.

"Right now the Federal Farm Board is urging the cutting down of acreage planted to various crops to get relief from the present surplus situation. Individual farmers can help by doing their part in that program.

"The individual farmer has a very direct interest in the work of the Federal Farm Board. If he feels he needs assistance or advice the Federal Farm Board urges that he make his wishes known. It will be the duty and the pleasure of the Federal Farm Board to respond as fully as conditions will permit."

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ANNOUNCEMENT: You have just heard the report of an interview with Dr. Frank B. Bomberger, in charge of organization work for the cooperative marketing division of the Federal Farm Board. This report is one of a series presented each Thursday by this station in cooperation with the Federal Farm Board and the United States Department of Agriculture. It is part of our daily program feature entitled "Your farm reporter at Washington."

UNITED STATES DEPARTMENT OF AGRICULTURE
Radio Service
OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Friday, March 21, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes

Dairy Interview No. 27: FARMERS' ORGANIZATIONS AND QUALITY MILK

ANNOUNCEMENT: Your Farm Reporter has already frequently emphasized the importance that Department of Agriculture dairy specialists and economists attach to a high quality milk supply. But the question of quality in milk production is so timely right now that we asked him to get us another report on it. So in today's report to dairymen he brings you a view of the problem from the standpoint of farmers' organizations. Well, Mr. Reporter how are farmers' organizations helping to improve the quality of milk?

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I want to tell you about an experience of mine that flashed into my mind while I was talking with Mr. Ernest Kelly about this question of quality milk. I guess you'll all remember Mr. Kelly as the chief market milk expert of the Department of Agriculture. You remember I've already brought you reports of several interviews with him.

Well, I returned home late one summer after a year in college -- late and, as usual, just about broke. Wheat-threshing had already started and farmers had already arranged for their help. My folks were living in town then, so I was out of a job. And worst of all, every one of my friends was working and making money.

After loafing for a few days I finally got a hurry-up telephone call from a farmer friend. One of his wheat pitchers was sick, and could I come out right away? Well, that was 11 o'clock in the morning and I was so excited I didn't bother to eat dinner. I stuffed a cheese sandwich in my pocket and lit out to catch a ride.

It was a blistering hot day. I had done no hard work in the sun for a year, and I had only the cheese sandwich to fortify me. I wanted a steady job and I set out to prove I could pitch with the best of them. But I didn't think about these things. You can guess the result. About the middle of the first load I felt that dizzy sensation in the pit of my stomach. And by the time I'd pushed the last shock on the wagon my legs were beyond control. They refused to function.

I guess I was lucky the effects weren't more serious. But after a little rest in the shade I felt better and by taking it easy I managed to finish out the afternoon. But even taking it easy, I'll always remember that afternoon asone of the longest afternoons of my life.

Perhaps if I'd eaten dinner beforehand I'd have been all right. And I might have been all right if I hadn't started out too fast. But in any event I wouldn't go out and pitch wheat on a hot day now without a little previous outdoor work to toughen me up.

Well, as Mr. Kelly talked, it seemed to me that some dairymen might get into a somewhat similar fix, figuratively speaking. The main idea in dairying lately has been to increase production per cow. And there's no denying the need for that, and there's no denying the profits that result from it. Just as there was no denying my need of a job and my need of the money that a job would bring.

But if dairy farmers concentrate on that one aim alone, it's possible that they'll defeat their purpose, just as I almost defeated my purpose by going at it in a sort of half-baked fashion. They may find themselves waking up in the shade as I did because they failed to take other things into consideration. They may even lose much of their business just as I almost lost my job.

Profits in future dairying are going to depend so much on what happens on the consumption side as well as on the production side. The question is, will we back up our economical production with methods to increase the market value of the products? That question is mighty important now. But Mr. Kelly believes it's going to be even more important in the future than it is now.

And, as he and others have declared to me and to you before, efficient marketing of dairy products is largely concerned with quality. And of course here is where farmers' organizations can play such an important role in the future dairy picture.

Everybody is familiar with what the apple growers and the citrus fruit growers, to mention two well-known instances, have done through organization. By grading and standardizing their products and thus maintaining quality at a high level they are able to command quality prices. They have stimulated consumption of their products. They have built new markets for them. They have for the most part avoided market gluts. Even when markets are poor, you know, there is usually a ready sale for the products of known high quality. It is the low-grade products that glut the market.

But, as Mr. Kelly points out, we don't have to go outside the dairy industry to find good examples of this. Take the big cooperative organization that markets dairy products in the state of Minnesota. Butter from this organization commands a higher price than ordinary butter because it is marketed on the basis of high quality. And Minnesota creamerymen have made satisfied customers of old markets and they've created new ones on this basis.

Mr. Kelly suggests that the production of quality milk is an economic question, really a trade problem of the dairy industry. And he declares that the industry, as an industry, must take care of it. Of course, when you come right down to it, the problem is up to individual farmers. But it can be solved most satisfactorily when farmers work together through organizations.

So organizations of milk distributors, dairy councils, and milk producers are taking the initiative. They realize that if they are to maintain their present markets and gain new ones, they must produce milk that will please the consumer. They realize it all the more because of some unfortunate past experiences. Several milk sales organizations have run into serious trouble in past years because they accepted all milk their members sent in, regardless of its quality.

Dairy economists estimate that the marketing of poor quality milk and cream results in a loss each year of around 40 million dollars. And I don't believe I'd be divulging any secret if I said that the dairy industry could use that 40 million dollars very handily.

Mr. Kelly tells me that a number of cooperative dairy organizations have established what they call quality-control divisions, to assist their farmer-members in producing higher quality milk.

This, of course, bringsup a very important question, the question of reflecting the premiums paid for high quality back to farmers. And many organizations are doing that now by grading milk and cream and paying for it on the basis of quality.

One big organization reports that in a little over a year the average premium paid to producers for their milk increased from less than 1 cent a gallon to a little over 2 cents a gallon.

Another association makes the following report. It had been carrying on quality-improvement work for about two years and a half. Then it started to pay a small premium for good quality milk. The first month only about one-fourth of the members collected premiums. But by the end of the year members had improved the quality of their milk to such an extent that almost three-fourths of them received premiums.

Now my time's about up, but first I want to give you Mr. Kelly's own final words on the question. Here's the way he sums it up:

"Improvement of quality," he declares, "is one of the vital, economic problems facing us today. And that includes not only market milk going to cities and towns but milk going into manufactured products. And until the dairy industry realizes that this IS a trade problem, and until it takes wholehearted steps toward controlling quality, dairy producers will not begin to get the profits or the markets they should get."

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ANNOUNCEMENT: Your Farm Reporter has just concluded his report to dairy farmers on the part that farmers' organizations play in improving the quality of milk. He's asked me to mention several bulletins that you may want. Get your pencils ready and I'll read you the titles and numbers. Here they are: "Production of Clean Milk," Farmers' Bulletin No. 602-F; "Improved Sanitation in Milk Production," Leaflet No. 3-L; and "Washing and Sterilizing Milk Utensils," Farmers' Bulletin No. 1473-F. Your Farm Reporter will send you these bulletins free of charge if you'll write him in care of Station____ or in care of the Department of Agriculture in Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON Monday, March 24, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes. All Regions.

KEEPING BROOD MARES FOR PROFIT

OPENING ANNOUNCEMENT: This is Monday, and here's Your Farm Reporter ready to give the regular Farm Reporter program which comes to you from this station every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. Today Your Reporter is going to talk about the profit in keeping brood mares on the farm, and especially the small farm. All right, Mr. Reporter.

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I once heard a story of a man who walked into a store and asked for five cents worth of crackers. The merchant filled a small paper bag with crackers and passed them over to the customer.

"Please charge it," remarked the customer as he picked up the bag containing the crackers, and prepared to depart.

"I can't do it," came the merchant's firm reply.

"I know, but my boy is sick, and he wants some crackers, and I'll pay you all right ------- just give me a little time," was the strong protest from the customer.

"That's all right," replied the merchant, "If your boy is sick I'll give you the crackers, but I can't charge anything else to your account until you make some arrangements about paying what you already owe me."

I am of the opinion that the above story is an exaggeration, but it drives home the fact that this is a day of business, and that we are growing into the habit of watching our corners, and transacting our affairs in a business-like manner, in order that we may know where we stand. This story on watching our corners brings up an economic point that was clearly illustrated to me the other day by two Georgia farmers who were discussing crop conditions over at the post office.

"I just about broke even on my crops last year," remarked one of the southerners. "I broke even on my crops and made exactly $345 on my mule colts," replied the other sunburned farmer.

Profit from mule colts put me to wondering. We used to raise a lot of colts on our farm down in Tennessee, and it was a profitable side

line too. One of my cousins in southern Illinois makes money today raising colts from the brood mares that do most of his farm work, and I have a friend over in Missouri who, as a general rule, makes as much clear money from his colt crop as from his cash farm crops.

I thought you radio people would be interested in anything that might help you make more money from your farming operations, so I went over and had a talk with Mr. J. O. Williams, who is in charge of the horse husbandry department of the United States Bureau of Animal Industry. Mr. Williams is from Ohio, he's been with Uncle Sam's horse department for about 22 years, and has a pasture full of horse information. I asked Mr. Williams to tell you listeners something about the profit that might be derived from keeping brood mares on the farms, and here's what he has to say on that subject:

"Farming today is both specialized and diversified. It is specialized in that a farmer has to know what he is doing. It is diversified in that the operations must be flexible enough to meet changing conditions without causing too great a loss. Twenty-five years ago most of the farm work was performed by horse power. In recent years tractor and machine farming have greatly aided farm operations, and these, coupled with flexible horse power, make it possible for a farmer to handle his farming operations with a great deal more accuracy today, if he will only let each unit fit into the place where it belongs and thereby aid all the other farm operations."

"How is the horse situation in this country today?" was my question to the chief of Uncle Sam's horse department.

"Well," he said, "The total number of horses on farms in this country on January 1, 1929, was slightly over 14 million. Mules at the same time numbered nearly five and a half million. This is a reduction in horses of approximately one-half million head and of mules 85,000 head since January 1, 1928, and represents the lowest level in our national horse and mule population for many years."

"Then," I said, "Our horse population is actually decreasing."

"Yes, it is," he replied,"The total decrease for all horses from 1920 to 1929 amounts to about 23 per cent."

"Well how is our colt situation?" was my next question.

"It's worse than the horse situation," was Mr. Williams' candid reply. "The decrease in colts on the farm under two years of age from 1920 to 1929 amounted to 59 per cent. It requires about one million new colts every year to maintain our horse population at its present level. Actually about a half-million new colts are foaled or born in this country every year. Therefore, our colt crop is right now on a half-rate basis."

I next asked Mr. Williams what caused this steady decrease, and I want you to listen to his answer. Here it goes:

"It has been largely a phychological situation. Producers have

wondered whether there would ever be a recurrence in the demand for horses and mules, and have been hesitant about resuming breeding operations. While they have been hesitating, the horse population has been decreasing until at the present time, there is a shortage of good work animals, and this shortage promises to become more acute within the next few years. This fact is already evident to most of you farm listeners at this time if you are faced with the problem of mating mares to high-class stallions or jacks. These individuals are getting scarce."

"Is the general horse price lower or higher than it was a few years ago?" was my next question to the horse specialist. Here's his reply.

"The present average valuation of horses on farms is $70 per head, and the average farm value of mules if $82 per head. This quotation is for January first, 1929, and shows a slight increase in valuation over the 1927 and 1928 prices, and indicates the horse and mule cycle has turned upward."

"Now Mr. Williams," I said, "Tell the farm radio listeners how they can take advantage of this situation."

"I'd rather not try to tell people how to do things," he replied. "Just let me state a few facts and then let those who can profit through the use of these facts, do so."

"There are a lot of people using horses on farms at the present time without giving the horse situation a thought. Of course these present horses have got to be replaced, and what the replacement price will be, nobody knows. Now there are many farmers so situated that from one to four or five good brood mares would be an actual asset to their farms. These mares could be used for farm work and would certainly pay their way, and in addition would produce a colt each year which would be worth oh, we'll just say on an average of about $75.00. This colt money would be practically clear profit, and at the same time the mare would consume grain and hay produced at home. This in a small way would aid in controlling surpluses of these two major crops."

Now I want you radio people to get the summarizing statement Mr. Williams made in regard to the present horse situation. Here it is:

"A good mare can be bred at 3 years of age. Under general farm conditions she can be counted on to produce about 8 colts. These colts pay a special coupon dividend in addition to the work the mare performs. Breeding can be arranged so that colts may be dropped either in the spring or fall which ever is most convenient to the farm layout.

"In conclusion, we believe that farmers should now carefully study their farm power situation, and those who will continued to use horses and mules must face the problem of replacing ageing animals with young stock before an acute shortage occurs. What the prices for suitable replacement stock, if it can be obtained, will be a few years hence is problematical, but it is safe to assume that it will be much higher than

at present."

This closed the interview with Mr. Williams, and the purpose of this talk is not to try to get you to go into the horse business on a big commercial scale and get rich in a few years, and then retire. No, not that, at all. We simply want you to know that there is often very good money in raising colts as a side line to your regular farm operations. If your farm layout offers such an opportunity------and you care to make the undertaking------that side line will more than likely be an additional source of income which will help you make more money from your farm.

If you are interested in a further study of this question, write this station for a free copy of Farmers' Bulletin No. 803-F, "HORSE-BREEDING SUGGESTIONS FOR FARMERS,"

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CLOSING ANNOUNCEMENT: You have just listened to Your Farm Reporter give the regular Farm Reporter program which comes to you every week day, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. Write this station for a free copy of Farmers' Bulletin No. 803-F, "HORSE BREEDING SUGGESTIONS FOR FARMERS."

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

YOUR FARM REPORTER AT WASHINGTON — Tuesday March 25, 1930.

Crops and Soils Interview No. 28: — The Farmer and the Census.

ANNOUNCEMENT: Once every ten years the U. S. Census man comes around. Now your farm reporter at Washington has been talking to some of the specialists of the U. S. Department of Agriculture and they have pointed out to him some of the features of the census questions in the farm schedule --------- Maybe you would like to hear about them----All right, Mr. Reporter?-----

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It won't be long now. The census men will be around at your place next month. They start out this time next week.

You all know what they are going to ask you. You, no doubt, already have a sample copy of the questions you will be asked about your farm business. Some of you have already made out your answers to the questions. All you will probably have to do will be to read them off to the census taker and let him enter your answers on another sheet.

That is the way to do it. All of us should go over those questions carefully and have the answers ready when the Census taker comes around. The farm economists of the Bureau of Agricultural Economics of the U. S. Department of Agriculture, have been pointing out to me how important it is to us all for the government to get the information about farming that is asked for in this year's census questions.

Of course, we all realize it is important to check up every so often and, as the saying goes, "find out where we are at." But according to the farm economists that is more important than usual now. As most farmers know first-hand, farmers in this country have suffered for nine years from low prices for their farm products.

That is known in a general way. But in working out any measures of farm relief, it is the utmost importance to have accurate information as to the actual situation.

The purpose of the agricultural census is to find out the conditions in the different parts of the United States and get the actual figures which can be compared with past census reports. That comparison will show in what direction the agriculture of each part of the country is trending. As you can readily see. the Census figures really give the only complete basis for study of farm conditions or for making laws to improve farm conditions.

All of us should give the Census takers every help we can to get correct and complete information on all the questions.

For instance, farm taxes and farm mortgage debts in some sections are big problems crying out for remedy. As you may have noticed, the census questions only ask the total amount of taxes you paid on the property on your farm and the amount you paid on the land and buildings. The questions also ask the amount of mortgage debt, and the amount you have been charged for interest, and commissions, and bonusus, and premiums on the farm you operate and any other farm land you own. As you may realize, interest payments and other charges on mortgages has become a very heavy burden on agriculture in this country. The need for more complete information on this subject is very urgent.

The census this year is going into the business end of farming more thoroughly than any cnesus we have had before. Some of these questions asked are being asked for the first time.

You may have noticed some of them. Besides the questions about your expenses for taxes and mortgage debts, this year the census wants to know what is your income from the sale of crops? and livestock, and livestock products, such as milk, eggs, and the like. Also the total sales of all products.

You need not hesitate about telling the Census taker these things. No figure you give him will be revealed. This information about your farm just goes with like information from every other farmer to supply the government with the total accurate facts. As far as you and your individual report is concerned, this information will be regarded as strictly confidential. If any census taker reveals any such information, it will be just too bad for him. He may land in jail or be given a stiff fine, or both.

One of the series of questions will give far more complete information than we have had up to now about use of power on the farms. How many tractors, motor trucks, and automobiles, and stationary gas engines, and electric motors, and combine harvesters are used on farms in this country? or in your State? The only way to get an answer to that is for each farmer to tell how many he has. It is the same way with the questions about such things as whether you have a telephone, or water pipes in the kitchen, or a bathroom.

When they get to the bathroom, it may seem the questions are getting pretty intimate. But these things are not asked just to be nosey. We are all interested in knowing accurately just what conveniences farmers have, compared to city folks, for instance.

This year, the dairy and poultry get more attention even than they have had in past censuses. You'll notice, they not only want to know the number of milk cows you kept, but they want your estimate of how much milk you produced last year. And also what you got for it, and the cream, and the butterfat, and the butter. Then too, you are asked to tell the number of cows you are milking at the time the census man comes around in April and how much milk they are producing at that time.

Some farmers don't know how much they produce in a year and some just guess. But we can all tell how much our cows have been producing a day for the last few days, so those last two questions will probably give the specialists a better basis for figuring how much milk we produce in this country in a year's time than the yearly figures themselves.

This year's census questions will also give a better basis for estimating meat production in this country than the figures of ten years ago did. The census asks the number of each kind of farm animal sold, the number bought, the number slaughtered on the farm for home use and sale and also the number of hides and skins sold. These questions were in the census of 1910 but were not asked in 1920. Since 1910 there has been a tendency to sell or slaughter younger animals and so just asking how many animals are on the farm when the census is taken doesn't give an accurate means of determining the true size of our livestock crop.

I just mention a question here and there. But you have the agricultural census questions there in the house. Think out your answers. Note them down on that sample sheet. You keep that yourself; but having it already worked out will help the census taker when he comes around.

And be patient. The farm specialists and census men almost sweat blood trying to work out new questions which would give a more complete picture of farm conditions, and yet keep as many the same as possible so as to make use of past records in studying the trend of farming today.

Remember that by doing your share in giving complete and accurate answers you are helping supply the fundamental data which will be used in solving many of our farm and market problems. The accuracy of the 1930 census depends on you.

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ANNOUNCEMENT: This timely word from your farm reporter at Washington is part of a series presented five days each week at this hour by Station------ in cooperation with the United States Department of Agriculture.

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UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

YOUR FARM REPORTER AT WASHINGTON Wednesday, March 26, 1930.

NOT FOR PUBLICATION

Speaking Time: 9 Minutes.

Poultry Interview No. 28: DUCKS---GEESE---PIGEONS

ANNOUNCEMENT: Several folks have written in to remind us that so far Your Farm Reporter has confined his poultry reports to chickens and turkeys. They remind us that many listeners are interested also in pigeons and ducks and geese. So for today we asked Your Reporter to bring us some information about raising pigeons, ducks, and geese. And now here he is, ready to report. All right, Mr. Reporter.

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They say that one of the first rules of good writing and speaking is to stick to the point, and it's a pretty good rule. But when the boss mentioned geese, ducks and pigeons to me all in one breath I thought of something entirely irrelevant and immaterial, as the lawyers say. I thought of what our language would have suffered if it hadn't been for pigeons and geese and ducks.

Take such words as goose flesh, and pigeonhole and pigeon-toed. And such expressions as "silly goose," and "duck soup". And how it would handicap young lovers if they could not call each other "ducky".

Of course chickens and turkeys---the whole poultry family in fact---have contributed their share to our great American vocabulary also. They've given us all sorts of colorful expressions, such as "talking turkey", "as scarce as hen's teeth", "chicken hearted" and so forth.

But coming down to the point now, I went to see Mr. A. R. Lee, who is a specialist on ducks, geese and pigeons as well as on chickens. Mr. Lee has written bulletins on goose raising, duck raising, and squab raising, and I'll give you the titles right now so we can have that out of the way. Here they are: "Squab Raising," Farmers' Bulletin No. 684-F; "Duck Raising," Farmers' Bulletin No. 697-F; and "Goose Raising," Farmers' Bulletin No. 767-F. If you're interested in squabs or ducks or geese you'll find valuable suggestions in these bulletins.

Right now it seems that the big problem of squab raisers is an economic problem. It seems that market prices were low in 1929, in fact considerably lower than for the past few years. So Mr. Lee believes poultrymen who produce squabs for market ought to investigate market conditions carefully before deciding to increase their output.

The demand for squabs is rather limited anyway, as you know, and is largely confined to big cities. Many folks think squab meat is a great delicacy but American consumers as a whole are slow to acquire a taste for it. Because of this Mr. Lee believes the big need in pigeon raising is improvement in breeding. Improve quality, he says, and also maintain the average production per pair, which now is 6 or 7 pairs of squabs. Cull the breeding flocks carefully and keep only the pigeons from high-producing parents. Squabs produced in March, April, and May generally make the best breeders.

I asked about feeding and management and here are the main points as Mr. Lee gave them to me. (If you want details you can get them in Farmers' Bulletin 684-F.)

As you know, most folks who raise pigeons for squab production keep them confined in a wire-covered yard. Pigeons mate in pairs and both birds share equally in the work of raising the young. The male sits on the eggs half the time and also does his share in feeding the youngsters. Until they're about four weeks old squabs get all their feed from their parents, at which time they're ready for market. They grow so rapidly that they reach two-thirds of their mature weight in four weeks.

Peas--generally Canada field peas--are recognized as an essential part of the squab ration. Many people also use commercial-mixed pigeon feeds, Mr. Lee said. He believes that you'll get best results by feeding grain in a hopper and by keeping plenty of feed available, so that the pigeons have a liberal allowance both for themselves and for their young.

Pigeons are usually quite free from disease troubles, but if they're closely confined thorough sanitation is necessary to keep them healthy. Keep both house and yard clean, advises Mr. Lee, and then be sure to clean out the nests thoroughly when you market the squabs.

Incidentally most squab raisers provide a double nest for each pair of pigeons so that feeding the squabs won't interfere with laying more eggs.

The main consideration in raising ducks and geese is also an economic consideration, according to Mr. Lee. Both ducks and geese can be successfully raised on farms, but the opportunities for making money are more limited than they are in chicken raising. Duck prices compare rather favorably with chicken prices, but geese bring considerably lower prices - relatively speaking - than hens.

I asked about the present demand for geese and ducks.

Mr. Lee told me that the demand for ducks is fairly good in the large cities, and especially in cities where people from other countries make up a considerable part of the population. The demand for geese is more limited and is largely confined to the holiday season.

Of course duck farming is carried on extensively on a commercial scale, particularly on Long Island, New York. You'll find Long Island ducks on sale in many cities.

In some European countries ducks and geese, especially ducks, are raised for egg production, but in the United States they're raised almost entirely for meat. There's a good demand for duck eggs around Easter time, but that's about all.

You might be interested to know, incidentally, that a duck holds the world's record for egg production. Australia claims the record with an Indian Runner duck that produced 365 eggs in a year.

Geese and ducks, and other waterfowl, need plenty of green and bulky feed, which of course they can get on farm range. They also need sand and grit. And to increase egg production at this time of year, give them a mash feed.

We naturally associate both ducks and geese with water, and most of us have used the stock rainy-day expression, "Good weather for ducks." But Mr. Lee says that water isn't absolutely essential. It is desirable, though, during the breeding season.

Pasture is the most economical feed on the farm, and after they're a few weeks old ducks and geese will get along on it without much additional feed, that is until fattening time. Of course on commercial farms ducks are fed heavily and forced for rapid growth. They reach market size in 10 to 12 weeks, weighing four to six pounds.

Well, I see my time is up. But in closing let me suggest again that you write for those bulletins.

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ANNOUNCEMENT: That was Your Farm Reporter at Washington, bringing you his report on geese, ducks, and pigeons. I'll read over again the titles and numbers of the three bulletins he mentioned. The bulletin on goose-raising is Farmers' Bulletin No. 767-F; "Squab-Raising," Farmers' Bulletin No. 684-F; "Duck-Raising," Farmers' Bulletin No. 697-F. Address your Farm Reporter at Station_____ or at the Department of Agriculture in Washington.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

YOUR FARM REPORTER AT WASHINGTON. Thursday, March 27, 1930.

Cooperation Interview No. 28: The National Livestock Co-op Plan.

ANNOUNCEMENT: Plans have now been made for a farmer-owned-and-controlled National Livestock Marketing Association. We sent your farm reporter at Washington to the co-op specialists of the Federal Farm Board to get us an outline of what this new organization is and how it works ------ Your farm reporter is here now ----- Tell us about this new plan, Mr. Reporter -------

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We are talking big business now. Livestock production is the biggest farm business in this country.

When you think of the hogs on all our farms; and the cattle; and the sheep; not only in our pastures and feed lots, but on the ranges; you get some idea of how big it is -- and how varied.

For many years, as Mr. C. G. Randell, of the cooperative marketing division of the Federal Farm Board, has pointed out to me, we have been marketing our livestock in much the same way our fathers and grandfathers did. In the meantime, the buyers of our stock have modernized their market machinery. Livestock buying is practically centralized and limited relatively to a small group of men.

In recent years, farmers and stockmen have joined together to form regional co-ops and terminal marketing associations, as a step in the improvement of our merchandising machinery. But for the most part the livestock co-ops in one section have been operating independently and competing with the livestock co-ops in other sections. Further than that at a number of markets two or more livestock cooperatives have been in competition with each other.

Now, however, farmers' regional and terminal co-ops are getting together to modernize our livestock marketing machinery. They are going to meet centralized buying with centralized selling. That is the central idea in the formation of this new National Livestock Marketing Association. The stock in the National will be owned by farmers' livestock co-ops; including the Nation Order Buying Company, the Western Cattle Marketing Association, other regional associations, and farmers' terminal commission agencies.

All these are bound together as members of the National Livestock Marketing Association and contract to sell and market their livestock according to the policies worked out by the sales board of the National Livestock Marketing Association. In other words, the new National will coordinate and control the sales in the interests of all its members.

It will centralize selling by the co-ops.

You may well guess, it was quite a job to figure out a plan to take care of the interests of all classes of livestock raisers and all different ways of selling. Yet this plan does it. Whether you produce a few hogs or a few head of cattle in an eastern feed lot or whether you produce cattle or sheep by the thousands on a western ranch, Mr. Randell tells me, the new co-op will take care of your interests equally well. If you prefer to sell on the central markets or direct to the packer, the co-op machinery is provided by which you can do it.

For instance, the National Order Buying Company, which is to be a member of the National Livestock Marketing Association and which is now owned by terminal livestock sales agencies - will be broadened to include in its membership regional cooperative concentration yards. The Order Buying Company will handle a lot of the direct marketing business which has heretofore not been marketed in a centralized way. The National Order Buying Company will also serve terminal market associations by filling orders and providing facilities for handling livestock. It will probably be the only member of the National Livestock Marketing Association which will have need for much in the way of physical facilities, such as yards and the like.

Livestock men who sell on the central markets will have terminal co-op agencies which are members of the National Livestock Marketing Association to handle their stock for them. And all these member agencies will be supplied every day by the National with the latest and best information on supply and demand conditions. In other words, livestock sellers will be provided with information comparable to that furnished by buyers to their representatives.

The interests of buyers and sellers of stocker and feeder cattle and sheep have also been taken care of in the new co-op plan. A separate organization under the control of the National, Mr. Randell explains, may take care of filling orders for cornbelt feeders for stock on the range and financing feeding and pasture operations of stockmen. That organization is known as the National Feeder and Finance Corporation, he says.

That word "finance" struck me, and I asked if that company was going to make loans to producers. Of course, that is what it is for, Mr. Randell told me, and then he went on to trace the route the money takes.

It seems the Federal Farm Board makes the original loan to the National Livestock Marketing Association. This money passes to the Feeder and Finance Corporation through the purchase by the National of the capital stock of the corporation. The National Feeder and Finance Corporation acts as a holding company and organizes regional credit corporation. Those regional credit branches of the National Feeder and Finance Corporation make the loans to the individual farmer to finance his feeding operations. Loans are made at a reasonable rate of interest and are secured by chattel mortgages on the feed and the livestock itself. In order to get these advances, the farmer must have the endorsement of the terminal or other cooperative sales agency.

So you see, all phases of the livestock business are tied up together in a system which heads up in the National Livestock Marketing Association.

In order that the member associations and their individual farmer members may be kept fully informed not only about the new organization itself but about market conditions, the National Livestock Marketing Association, through its National Livestock Publishing Association will publish magazines or newspapers for their benefit.

Its information service is one of the fig features of the National "Knowledge is power" in the livestock market. Through its Order Buying Company, it will be in a position to get accurate information or direct buying. Through its Feeder and Finance Company, it will also be in touch with the supply and demand of feeder cattle. Information from the co-op members in the central markets will complete the picture, and give co-ops better market information than they have ever before had.

The sales board which will determine the selling policies will be composed of representatives from the Order Buying Company, the Feeder and Finance Company, and the National headquarters itself so that the different branches of the livestock business will be considered in working out sales plans.

Then too, Mr. Randell points out, the national association is expected to perform another important function by standardizing and making effective prices and grades of livestock and livestock products. That is to be done through centralized control and the information as to production and demand, and through the association's work with the livestock advisory commodity committee which will later be established under the Agricultural Marketing Act. This, Mr. Randell declares, will probably be the greatest stabilizing influence in the livestock industry.

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ANNOUNCEMENT: You have just heard a sketch of the new national cooperative livestock plan as traced to your farm reporter at Washington by Mr. C. G. Randell, of the marketing division of the Federal Farm Board. Anyone interested in further details about this organization can get them from the Federal Farm Board, Washington, D.C. This report today is presented by this Station----- in cooperation with the Federal Farm Board and the United States Department of Agriculture.

UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

MAR 25 1930

U. S. Department of Agriculture

YOUR FARM REPORTER WASHINGTON Friday, March 28, 1930

NOT FOR PUBLICATION

Speaking Time: 10 Minutes

Dairy Interview No. 28: AVOIDING PASTURE WEEDS THAT AFFECT MILK QUALITY

ANNOUNCEMENT: Producing high quality milk is essential to profitable dairying nowadays. And one of the big factors in producing quality milk is the problem of preventing weed flavors. So for his report to dairymen this week we asked Your Farm Reporter at Washington to interview Department of Agriculture experts on the subject of avoiding pasture weeds that affect milk quality. All right, Mr. Reporter. What did you find out?

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If all the jokes about garlic were laid end to end, who knows where they WOULD reach? Maybe a mile, maybe around the world, maybe to Mars--who knows? A few million miles is a small matter when nobody can prove that you're wrong, but anyway they would undoubtedly reach some place or other. Our jokemakers had discovered garlic long before halitosis was invented.

However, I take it that garlic has long since ceased to be a joke to dairy farmers. As you know it's one of the big causes of off-flavors in milk, and Mr. C. J. Babcock, Department of Agriculture market milk specialist, tells me that off-flavors not due to souring are causing losses to milk producers probably equal to the losses due to the souring of milk.

The problem of avoiding weed flavors is more important now than it used to be, it seems. People are drinking more milk, and they're demanding that it not only be sweet milk but that it have a pleasing flavor. They won't drink off-flavored milk, and so of course dealers won't buy it.

Mr. Babcock said there are many weeds that will effect the flavor of milk, especially at this time, early in the spring, but that garlic is probably more widely distributed than any other. In some sections garlic renders milk practically unsalable. Thousands of gallons of milk are rejected every year because of garlic flavor, and in the garlic season many large butter markets make separate and lower quotations for garlicky butter.

And the worst of it is, as you know, that once the garlic flavor and odor get into milk, there's no practical way for the farmer to get rid of them. The only economical way to keep the garlic flavor out of milk seems to be to keep the cows from eating the garlic plant.

This isn't strictly true, of course, because experiments show that if you take cows off pasture a sufficient time before milking the garlic odor will disappear. But to eliminate the flavor entirely, you have to remove them from garlic-infested pastures from 4 to 7 hours before milking. This is the next best step to eradicating the garlic from your pastures, but the only really satisfactory step is to get rid of the weeds.

According to Mr. Babcock, garlic flavors seem to enter milk mainly through the body of the cow. However, when milk is exposed to an atmosphere permeated with the garlic odor it will absorb enough of the odor to give it a pronounced flavor. So that leads to another rule: Be sure to store milk in an atmosphere free from garlic odor.

I asked how garlic affected butter.

Mr. Babcock replied that the garlic flavor seems to have a special affinity for butterfat. The flavor seems to be more pronounced in cream than in either whole or skim milk. So this may partly account for the fact that garlic flavors are so pronounced in butter.

Fortunately, most of the strong-flavored feeds and weeds are like garlic, in that their objectionable flavor is imparted to milk for only a short time after the cow eats. However, there are weeds whose flavor is imparted to milk for as long as 24 hours after they're consumed. In these cases there's only one way to deal with the problem, and that is to keep the cows off the pastures until you can get rid of the weeds.

Bitterweed is an outstanding example of this kind of weed. The bitterweed flavor is found in milk produced 24 hours or more after the cows eat the weed. So the only practical method of preventing bitter milk in sections where bitterweed is common is to keep the cows off the infested pastures.

Bitterweed often causes great losses, especially in the Souther States. It gives a bitter taste to milk, and sometimes the milk is so bitter that the milk is totally unfit for human food.

Incidentally, bitterweed differs from most other weeds and feeds in two important respects. One is that it does not impart any odor to the milk. The other is, that it doesn't seam to affect butterfat to any great extent. The flavor is always more pronounced in skimmilk than in whole milk or cream.

From the farmer's standpoint, says Mr. Babcock, there are two important advantages in producing milk with a pleasing flavor. The first is, you don't lose money by having your milk rejected by buyers because the flavor is bad. The second is, good flavor extends your markets by increasing consumption. Milk of pleasing flavor will tend to sell itself, and without question, people will drink more milk if the flavor is good.

"In producing milk of good flavor," Mr. Babcock declared, "preventive measures are always best. Therefore my advice would be that dairymen improve

their pastures by eradicating all weeds which are likely to taint milk. But until they can do this, I'd suggest that they remove cows from the infested pastures as long as possible before milking. The longer the interval between taking cows off pasture and milking, the less pronounced will be the abnormal flavors.

"Of course, when you have weeds whose flavor is imparted to milk from one milking to the next, you have to keep cows off pasture entirely."

Mr. Babcock has written a four-page leaflet outlining his recommendations for dealing with flavors and odors in milk, taking up feed flavors as well as weed flavors. The number is Leaflet No. 25-L, and I suggest you write for it if you want more information. It's free and I'll be glad to get it for you.

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ANNOUNCEMENT: That concludes Your Farm Reporter's reports for this week. He'll be back again Monday to bring you the results of his interview with Department of Agriculture livestock specialists. In the meantime, if you want that bulletin, write him in care of Station-----, or the Department of Agriculture in Washington. The title is "Preventing Feed Flavors and Odors in Milk," and the number is Leaflet No. 25-L.

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UNITED STATES DEPARTMENT OF AGRICULTURE

Radio Service

OFFICE OF INFORMATION

MAR 25 1930

U. S. Department of Agriculture

YOUR FARM REPORTER AT WASHINGTON Monday, March 31, 1930

NOT FOR PUBLICATIONS

Speaking Time: 10 Minutes. All Regions

HOW SERUMS AND VACCINES HAVE HELPED THE ANIMAL INDUSTRIES.

OPENING ANNOUNCEMENT: At this time we are going to listen to Your Farm Reporter talk about preventing livestock losses through the use of vaccines and serums. This is one of the regular Farm Reporter programs coming to you every day in the week, except Saturday and Sunday, through the cooperation of the United States Department of Agriculture. All right, Mr. Reporter, here's the 'mike.'

--ooOoo--

Well folks, I want to talk to you today about buying a lock for the stable door before the horse is stolen. It's easy to say "I told you so," after something has happened, but it's far more important to prevent the happening.

Late one summer afternoon in 1880 a mad dog attacked and bit a 9 year old boy who was plowing in a Mississippi Valley cotton field. The dog made its escape, and bit a number of farm animals that night, but was finally killed the next day.

At that time there was no known effective treatment for hydrophobia. The parents of a poor little boy waited in agony hoping that he might not develop the disease, but one day the unmistakable symptoms appeared. The doctor was called, but at that time science had no remedy to offer, so it was a case of waiting several days until death released the little fellow from his intense suffering.

This need not happen today. Science has stepped in with a vaccine treatment that is almost a sure preventive for hydrophobia if administered in time and according to instruction.

In the fall of 1901 a Tennessee farmer lost 28 of his 35 fattening hogs. Hog cholera did the damage. There was no known treatment for the disease at that time. Losses from hog cholera can be reduced to almost nothing today, through the early and proper use of serum and virus.

When I was a boy I worked for a New York banker who had a very fine livestock farm down in Virginia. A sudden outbreak of blackleg almost

wiped out the young animals in his fine herd of purebred cattle. He was practically helpless because there was no known blackleg treatment at that time.

Since those days science has stepped in with some wonderful discoveries, and today it is possible to produce livestock without being troubled with many of the scourges that were troublesome and expensive to the livestock producers 25 years ago.

I thought many of you listeners would be interested in learning how serums, vaccines and other biological products have helped the livestock industry, so I went over and had a talk with Dr. W. S. Gochenour specialist in animal-disease research in the United States Department of Agriculture. I asked him to tell you radio people about the use of vaccines and serums in the normal production of livestock on the farms in this country.

"Well," he said, "Twenty-five years ago a livestock raiser did the best he could with his animals and lived in hopes that he would get them to market before some scourge swooped down and blasted his profit. I think the early livestock producers of this country deserve a lot of credit for producing as well as they did.

"Of course today we have a very different situation. Guessing and luck have been practically eliminated, and replaced with scientific information, which, when properly applied, makes it possible to produce livestock in comparative safety."

I asked Dr. Gochenour to give me specific examples of how the livestock industry has profited by the use of vaccines and serums.

"Take hog cholera," he replied "That disease used to cost the hog raisers of this country millions of dollars every year. It was not uncommon 20 years ago for cholera to wipe out practically a farmer's entire herd of hogs. If the disease struck, there was nothing the farmer could do, except wait --- and wonder how many hogs would be dead the next morning. Such is not the case today. We know what causes hog cholera, and we know that the injection of the correct dosage of serum and virus into a hog in the proper way, immunizes that hog against cholera in 99 cases out of a hundred. One injection of the serum and virus immunizes the hog for life, and the cost of the material to immunize dozens of hogs is no more than the loss of one single hog would amount to."

Blackleg was the veterinarian's next subject. This disease hits cattle and sheep. The soil in certain areas becomes infected with the blackleg organisms which gain entrance into the body of animals through abrasions or punctures of the skin . Blackleg is very infectious and usually fatal. It affects young animals especially six months to two years and well-bred cattle seem to be more susceptible to the disease than common stock. There was a time when this disease killed thousands of cattle and sheep in this country every year. It still takes an annual toll from cattle and sheep, but science has provided a

remedy which prevents the disease if stockmen will take the time and trouble to make the proper injection of the blackleg vaccine.

Another disease which Dr. Gochenour mentioned was hemorrhagic septicemia or shipping fever of cattle and sheep. Like most of the other diseases mentioned this can also be prevented. It is caused by a small organism which strikes hardest in animals that are in a weak or run-down condition. For this reason shipping fever often affects animals which are being shipped to market and have been driven long distances or have gone without feed or water too long. The disease has caused livestock owners and shippers losses amounting to many thousands of dollars because they did not take the necessary precautions to prevent its occurence. Careful handling of animals which are to be shipped, regular feeding and watering and protection against exposure to weather, will help to check losses from shipping fever but science has perfected an aggressin which, if given 10 days before shipment, will usually prevent outbreaks of the disease.

Cattle, sheep, horses, and hogs, other animals, and even humans are susceptible to anthrax. I asked Dr. Gochenour to tell you something about the dreadful malady and here is what he had to say:

"Anthrax is a livestock disease most prevalent in low, wet sections which are subject to flood water. The organism lives in the soil of these damp or flooded sections, but it has been also found on hills and upland. At one time there was no remedy for this scourge, and it killed thousands of animals in this country. There is a remedy today. Vaccination prevents the disease."

At this point I asked Uncle Sam's disease specialist to tell us about rabies in sheep, cattle, horses, hogs, and dogs. It's called hydrophobia when it affect people. Listen to his reply. "Rabies is one of the most dreadful of all livestock diseases. It attacks practically all warm-blooded animals. There is no cure for the disease after it has once developed. Security from this disease lies in the prevention. The pasteur vaccine treatment is the only remedy, in case you are bitten by a mad dog, or other animal suffering from rabies.

I didn't have to ask about tetanus or lockjaw because I knew that vaccines solved that problem.

Now, how do the vaccines and serums help the animal industry? Well, you have already heard the answer. They help by preventing disease that used to cost livestock producers millions of dollars every year. In a few diseases serums offer a cure for the disease after it has developed, but in most diseases vaccines are used to prevent the disease from getting a foothold. It's a case of locking the stable door before the horse is stolen. The cost of vaccination is small considering the value of the animal, should it be lost. The livestock producer used to trust to luck to take him through. Today he can safeguard his animals against costly diseases by sanitation and vaccination. He can then feel reasonably sure that they'll reach the

market.

Science has taught us how to prevent many other losses which we used to believe were unavoidable. Tuberculosis, for instance, is a common malady of cattle, swine, and poultry. While we have no cure for this disease as yet, the tuberculin test is a reliable means of determining the presence of tuberculosis in an animal. Cattle owners who have had the test applied to their cattle and eliminate the reactors from their herds have saved further losses by preventing the spread of the disease to healthy animals. A similar method can be used in the case of swine. Poultrymen have also learned how to eliminate the avian form of tuberculosis from their flocks by culling out the hens that show a weakened and general unthrifty condition.

Of course many of you listeners will want more information on the subject of biological products and their relation to livestock disease but Dr. Gochenour settled that at the close of the interview by handing me the following publications:

Farmers' Bulletin No. 449-F, "RABIES OR HYDROPHOBIA."
Farmers' Bulletin No. 784-F, "ANTHRAX."
Farmers' Bulletin No. 834, "HOG CHOLERA."
Farmers' Bulletin No. 1018-F, "SHIPPING FEVER OF CATTLE."
Farmers' Bulletin No. 1355-F, "BLACKLEG."

CLOSING ANNOUNCEMENT: You have just listened to one of the regular Farm Reporter programs. Write this station for free copies of Farmers' Bulletin

449-F, "Rabies or Hydrophobia," 784-F, "Anthrax," 1018-F, "Shipping Fever in Cattle," 834-F, "Hog Cholera," and 1355-F, "Blackleg." This program came to you from Station_____through the cooperation of the United States Department of Agriculture.